

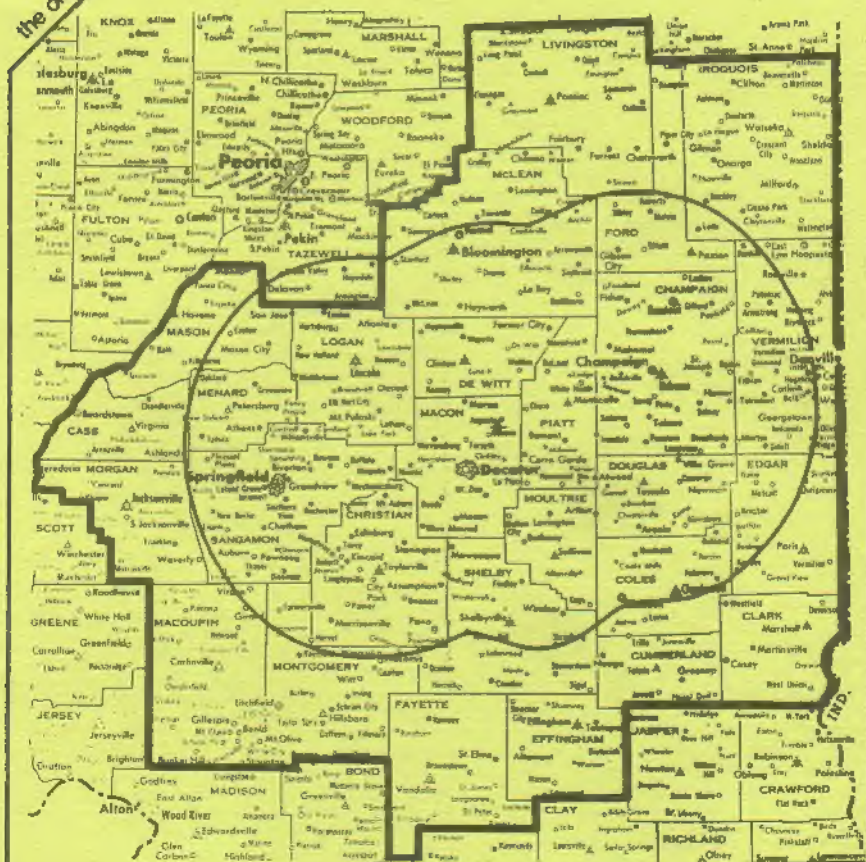
VHF-UHF DIGEST

the official publication of the Worldwide TV-FM DX Association

JUNE 1979

IN THIS ISSUE:

- County PSS nets
- Dominican TV
- AGC and TV DXing
- EFM update
- F₂ TV DX detailed



From The Staff :

WTFDA Headquarters, P.O. Box 202, Whiting, Indiana 46394

IT'S SUMMER...Summer is the peak DX season for most VHF/UHF DX enthusiasts. We're into the time of the year when E-skip can bring in scores of distant signals on 30-50 MHz, all low-band TV channels, and the 88-108 MHz FM broadcast band. Tropo activity is rapidly improving in many areas also, and everyone should be able to notice improving meteor scatter conditions by late July. We're also into another season of great interest to DXers—the DX club convention season! It's time to plan your summer vacation travel itinerary now. Be sure to include our club's convention in them!

COME TO BALTIMORE!...WTFDA's 1979 convention will be held in Baltimore August 3-5. The Convention Registration Form can be found in the May VUD. Since the area is adjacent to the U.S. capitol, it's a great chance to see the Washington, DC area for yourself and the family. Worried about gasoline problems? Many of the airlines that serve the area are offering summer discount travel fares. Since the era of relatively cheap air travel may soon come to an end, now's the time to take advantage! Also, don't overlook train or bus travel—they're very economical, and you don't have to worry about the gas! If you'd like to drive to Baltimore while taking the "sting" out of high gas prices, "pooling it" with a fellow DXer(s) will do the trick. We hope to have more convention info, plus a tentative schedule, next month.

WTFDA NEWSWIRE...Due to a lack of material, plus the prospect of newsworthy items to come from both the Video Expo and the Chicago Consumer Electronics Show, Morris Goldman will delay this column until the July VUD.

BITS...CATJ Satellite Journal has been moved to the transponder that feeds West Coast CATV's with Home Box Office pay-TV service on RCA SATCOM II...May E-skip activity so far appears to be running below average—but there have been some good openings in the southern latitudes...WTFDAer Paul Traska is still in need of logos for channel 2-6 TV stations for a VUD project...We hope to have word on a new editor for EASTERN TV DX next month...Pat Dyer's description of his F2 TV DX logging in this issue shows you what to look for.

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MAILBOX

John Zondlo
6617 Maryland
Hammond, IN 46323
(219) 844-8694
Deadline: 10th

New Members:

John R. Bolduc
Richard Douglas
George DuBois
Alvin Fair
Gray Fulk
Billy Holley
Jerry Hunt
Glenn Jacobs
Brad Lovett
Richard Miller, Jr.
Paul Mount
Steven O'Neill
M.C. Reid
John Sands
John Sulak
Philip Sullivan

10 Herrick St.
P.O. Box 1239
10048 N.E. Campaign
P.O. Box 1403
1533 Forest Drive
110 Roberson Road
314 N.E. 1st
RD #1, Box 354-A
421 E. College St.
4334 Wells St.
354 W. Columbus
9692 Alwood Ave., #6
1612 Kremer Ave.
5139 White Oak Ave., #12
16 Colvin Circle
935 Main St.

Nashua, NH 03060
St. John's, ANTIGUA
Portland, OR 97220
New Brunswick, NJ 08903
Mount Airy, NC 27030
Ripley, MS 38663
Perryton, TX 79070
Moscow, PA 18444
Coldwater, OH 45828
Weirton, WV 26062
Nelsonville, OH 45764
Garden Grove, CA 92641
Racine, WI 53402
Encino, CA 91316
Troy, NY 12180
Acton, MA 01720

Renewals:

Phil Boersma, Bill Coleman, Jr., John Combs, Edward Cotton, Michael Dorner, Jerry Franklin, James Gill, James Herkimer, William Higgs, Jim Jennings, William Johnson, Mark Lewis, Doug McAbee, Lowell McCown, Charles Mylod, Rod O'Connor, Steve Rich, Mahlon Stilwell, Jeff Wolf, Mike Worst, Robert Zent.

Rejoins:

Ed Brindle-1220 College Drive-Latrobe, PA 15650
W.J. Mansir-Box 593-Highland, CA 92346
Robert Pantazes-RD #2, Box 233L-Absecon, NJ 08201
Les Prus-8231 Fresno Lane, Apt. 203-Alexandria, VA 22309
Andrew Smith-RD 3, Box 268-Dillsburg, PA 17019
John Timm-W54 N116 McKinley Blvd.-Cedarburg, WI 53012
Steven Wiseblood-707 Loma Way-Santa Maria, CA 93454

Address Changes:

SEC Roosevelt Crawford - 440-44-0908 - HQ&A Co., 123d Maint. Br.-APO New York, NY 09068
Ed Houchins-Box 142-137 W. North St.-Niantic, IL 62551
David Legler-128 E. Magnetic St.-Marquette, MI 49855
Walter Wesolowski-PSR #46B-Medford, WI 54451

Renewals Due in July:

John Barber, Jr., R.S. Broadhead, John Clemmer, Bob Curole, Mike Dalton, Dennis Dean, John Ebeling, Ron Ginardi, Tom Huehn, Chris Landon, David Legler, Nick Lombardi, Mark Lucas, David Martin, Dan McDonald, Vic Melis, K. Noffsinger, Walter Patton, C. Hooper Phillips, Ted Pinski, Steven Shaffer, Gary Siegel, Ken Simon, Doug Talley.

New member JOHN BOLDUC learned about the club in Communications World. He's interested in BCB, FM and TV, and SW and PSB to a lesser extent. His gear includes an SX-650 receiver, a 10 element FM yagi mounted at 45', a fringe VHF antenna at 30', a deep fringe UHF antenna at 60', and Bearcat 101 and 210 scanners. John is also a member of NRC.

From the island of Antigua comes RICHARD DOUGLAS. His DX shack features a Nivico 6001 AM/FM receiver and an RCA XL-100 TV. He heard of the club in the World Radio-TV Handbook. More from Richard in Tidbits.

An electronics technician, GEORGE DUBOIS is primarily interested in PSB TX. He uses a Bearcat 210 and a Regency ACTW-10. Don Blevins, host of this year's convention, introduced George to WTFDA.

It never fails to amaze me the way people join WTFDA after reading an article about the club in a magazine published several years ago. We're happy to have GRAY FULK on board, who read the article Morrie Goldman did for Elementary Electronics in 1977. Gray is interested in TV and PSB, and FXs with Zenith 9" and 19" TVs and a Bearcat 210 scanner.

BILLY HOLLEY is one of a rare breed...a politician. He's joined the club after campaigning in his local county elections. Billy heard about the club from member Glenn Hauser. He DXs with a 21" RCA TV and several FM receivers. More from Billy in Tidbits.

From the Longhorn State comes new member JERRY HUNT, a 32 year old truck driver. He's into FM, TV and SW DX, and learned of the club in Communications World.

Member Pandall Clark is hard at work recruiting members, and one he's brought into the fold is RICHARD MILLER. Richard uses a Panasonic RF-4800. He's into SW and MW TV, and is also a member of NAKSA.

College student JOHN SULAK wraps up this month's introductions. He's a member of SPEEDY and IRC, and uses an FM stereo receiver connected to a Channel Master CH5200 antenna. The World Radio-TV Handbook led John to WTFDA.

Tidbits.....

The following letter from Peter Sawatzky (RR #4, Guelph, ON N1H 6J1) contains some fascinating info about DXing using computers. He's looking for someone to join him in studying the use of microprocessors in FM and TV DXing. Interested? Write to Pete for info. Here's his comments: "To date I know of nobody other than myself who has attempted to apply microprocessor technology to our hobby. For that matter I know of no one who has even attempted any sort of serious "automated" DX setup. Surely there must be sufficient technically oriented and interested members out there who might be interested in improving their hobby beyond mindlessly tuning up and down the band in hopes of an opening. About one year ago I completed a completely hardware oriented system (about which I have not yet found adequate time to write a worthy article) to automatically DX the entire FM band 24 hours a day. Very basically, the system works as follows: a memory bank is manually loaded through toggle switches with digital information which, via a DAC (digital to analog converter) addresses a varactor tuner (no moving parts). The digital information in 100 locations in memory corresponds to the 100 allocated FM band frequencies. This information is accessed at a maximum rate of 20 Hz and consequently the entire FM band is scanned once every 5 seconds. At the same time as the digital tuning information is accessed in memory, another 100 locations in memory are accessed, each of these containing digitally a value of AGC, i.e., the signal strength of the station normally found on the corresponding frequency. As the system scans the FM band, it compares the real-time AGC levels with those which have been programmed into the memory. When a real-time AGC level is greater than the programmed value, the scanning is stopped for a pre-determined maximum period of time and a tape recorder is turned on to record what the machine has determined to be DX. The actual varactor tuner used was that found in the Heathkit AJ1510A. The IF from this is fed into a Heathkit AJ-15, bypassing its mechanical tuner section. The system is, of course, too complex to describe in intimate detail in a letter and set me back nearly \$1,500 in parts, but has been successful beyond even the wildest dreams I had while designing and building it. Since it runs 24 hours a day and scans the entire band every five seconds (20 frequencies per second) it has the uncanny ability to simulate 100 DXers sitting in front of 100 receivers DXing night and day. While this system has given me fantastic results in Es openings (many at times when I was asleep at times of the year I would never have expected an opening), it still has a great number of shortcomings. While I have developed a circuit which encodes the frequency of the signals received on one channel of my tape, it does not encode times of reception on tape. Also, while the system is super for Es, it has severe shortcomings for Tr and MS, which may not be intuitively obvious until the operation of the system is learned in detail. In order to overcome these shortcomings I have decided to supersede the system with one involving a microcomputer. I have purchased an Intel 8085 based kit (the SDK-85). While there is still a mountain of development work to be done and parts to procure, I hope to end up with a system which will be the ultimate in automated DX. I appeal to any member who would be interested in applying microprocessors to FM (or, for that matter, TV) DXing to contact me for possible collaboration. While what I am doing is interesting and fun, I am sure it would be much more so if someone out there with technical background would show a similar interest. While DXing in itself can be satisfying, it seems to me that once such a hobby has been pursued for more than several years, it is necessary to supplement it in some way so as to maintain the satisfaction to be gained from it, and microprocessors seem like a natural progression for FM/TV DX." Pete has already started modifying his system with the new equipment he has, and has plans for some exciting additions to an already great system. If interested in collaboration, by all means contact him. Hopefully, we'll soon have an article from Pete detailing the entire system and any additions or modifications.

From Don Erickson we have word that he's already taking orders for the 1980 World Radio-TV Handbook. A pre-publication discount is being offered: "Nearly 500 copies of the 1979 WRTVH were shipped, with profits going to the Handicapped Aid Program. In order to make more secure arrangements for air freight shipment of copies of the 1980 WRTVH, orders are being taken now. Initial orders will be taken at \$11 per copy including UPS or Book Rate shipping of copies when received sometime in 1980. The \$11 price can be guaranteed only through 31 July 1979. The offer will be extended after that date only if there is no announcement of a price increase for the 1980 edition. The offer expires July 31 or immediately upon notification of a list price increase thereafter. Please send orders with check or money order in U.S. funds and a SASE for confirmation after shipment is completed. Lower left-hand corner of your order envelope should specify 1980 WRTVH. A full immediate refund may be obtained at any time for any reason. A few copies of the 1979 WRTVH are available at \$14, including shipping. Please mail all orders to: Donald Erickson, 6059 Essex St., Riverside, CA 92504. 714-687-5910 2100-0700 GMT." This offer represents a 33% savings on the 1980 edition, barring a price increase. The Handicapped Aid Program, in case you're not familiar with it, is an ANARC sanctioned organization that provides handicapped persons DXing equipment to get them interested in the hobby. It's main funding is an ANARC convention auction and Don's WRTVH contribution. Don had numerous problems with the 1979, which he details in a lengthy letter. In brief, he tried to order directly from the publisher in Denmark, but was told he must deal with the North American distributor, Watson-Guptill in Cincinnati. Don tried to get the WRTVH shipped to him air mail, but it wound up coming by seamount from Europe, contributing to a nearly 2 month delay in his distribution. Don blames several people for the delay, including those at Watson-Guptill and Gilfer Shortwave, a U.S. firm which sells WRTVH, and which is owned by WTFDA member Perry Ferrell. For a complete explanation of the problem, send Don a SASE.

Now we have an intro from new member Glenn Jacobs (address on first page of Mailbox): "As a fairly new member I thought intros were in order. I've been an avid TV and BCB DXer for the past 17 years. I also do a bit of FM DXing with a Marantz tuner and hold the ham call K3WEI, active on 20 and 15, but mostly 10 meters. My location is on a 70 acre farm about 2,000 feet up in elevation, 22 miles east of Scranton PA. Nearest VHF station is channel 12 in Binghamton. Nearest UHF is Scranton/Wilkes-Barre, far enough away that New York state covers channel 16 on a good tropo opening. Equipment used for TV DX is as follows: 19" Sony, GE portable, Phillips 19" 405-line set, Channel Master Super Crossfire with BT pre-amp, 7' Channel Master dish with Winegard preamp soon to be put up at 55', and HAM II rotators. Best DX catches on the VHF are KNBC Los Angeles in July 1976 on 2-Es, channel 7 Traverse City MI on tropo last summer, and BBC-1 channel 1 video, 1979. Hopefully a rhombic for F2 TV DX will be up by the time this is in print. Average daytime conditions extend out as far as channel 4 Ottawa and include all the Vs from NYC, Providence, CT, Boston, Albany, Rochester, Syracuse, Philadelphia, Altoona, and Buffalo--as many as 35 VHF at any one time. Bursts from as far as Cleveland on 8, Wheeling 7, Pittsburgh Vs, Manchester and Durham 9 and 11, plus Montreal 10 and Mt. Washington 8 make it in at various times for part of the day. Watertown 7 is also always in. Meteor scatter work is very productive in the 6-7AM period, with the test pattern from Cedar Rapids a regular whenever I look. Can't wait to get the dish up for this coming season! I look forward to reporting and becoming a part of this organization. Best of DX."

Here's a few comments on taping DX from Leo Boehl (622 W. Koenig, Grand Island, NE 68801): "I purchased a VCR last January in time to catch the Super Bowl, and thought I'd relay some experiences using one for DX. This particular recorder is an RCA VCT-200 (VHS format - 2 speed, mechanical tuners). Some of you may shoot me down for saying this, but I've never seen a color TV tuner yet that could pull in a weak signal as well as any B&W. I suspect the reason is the amount of color information needed to process the broadcast signal, which has to be literally screaming almost compared to most DX. In a side by side comparison among the RCA, a Sharp Lynitron 19", and a Zenith 21" B&W, the Zenith would consistently receive weak tropo stations while the two for color would see no signal present. Also, the same without splitters for side by side comparison and straight thru antenna/preamp. Being that you must go through the recorder's tuner, this is a bit of a trade off even if those DX's are very marginal at best. Don't know about the electronic tuners. Another aspect is using the recorder to TX a given channel while you are asleep or away. Not expecting much as just mentioned, I would set the unit for sign-on of KMTV-3 Omaha (150 miles) when experiencing weak groundwave the night before. With a picture and sound every DXer would consider acceptable the automatic speed control would hunt from slow to fast speed trying to find that "perfect picture". I'm sure

(Reehl Cont.) this could be defeated, but that, with the Cams Photofacts for it also, would be a can of worms so enormous I wouldn't wish it even on the infamous Murphy himself. My palms get sweaty enough just cleaning the tape heads. I don't mean to disappoint anyone, tho, 's I'm sure it will come in very handy for this E-skip season, and is a good added tool if you don't forget your "DX patience" while watching a 2 or 4 hour "blank" tape."

As promised, here's a few words from new member Billy Holley: "I have received Mexican TV stations: 2 on U.S. 2, 2 on 3, and 13 on 4, with color but without call letters or ID. With their Spanish up to speed and not that good it was sort of hit and run. Mexican radio FM 100-102 MHz also present. By the way, Ripley is to get its first FM station, owned by our mayor. Studio is on the square downtown in Ripley, with 225 foot antenna located approximately 12 miles southeast of Ripley, connected by telephone hookup. Also, KAIT & Jonesboro AP is increasing range with a new antenna soon. Anytime anyone needs mid-South info feel free to write and ask. The worst I could say is 'I dunno'."

From new member Paul Mount we have a raft of information: "I've contributed to Northern FM DX, TV News, and many times to Bruce Elving's column, now all I have to do is join the club. I enjoy reading the FM and TV contributions as long as there are reporter comments along with the station listings. After all, we are people, not just monitoring stations sending in the monthly list. I try to do this in my reports to each of the clubs; I'm active in IRCA, NRC & GWDXA. While I've experienced almost no FM DX of any kind, I do agree with Frank Merrill and others who say that FM or TV DX, when it is in, is much more exciting and interesting than good AM conditions. So far I think I'm a jinx to good conditions--when I've visited Joe Pella or George Greene or John Zondlo there's never been anything "going on", except for the time at Karl Forth's when I heard audio from Big Spring TX on channel 4, which was a big thrill for me. Similarly, I was almost panicky, hi, when I heard WHAP Indianapolis that morning in February. My location is almost ideal for DX in that there are no stations within 10 miles, only 7 within 30 miles of here, five of them being class A's. Nelsonville is halfway between the Logan and Athens dots in your FM Atlas in SE Ohio. We're in a mile wide valley. Reception is somewhat better at the top of the hills. I check conditions almost every day, usually around 0830, 1730 and 0000, just waiting for something unusual to come in. I don't know if these are good times to check, though. As of May 3 (my birthday no less) there's been no Es and almost no tropo or anything else noticed here. As for TV, with no antenna all we get is WOUB-20 from Athens; with the antenna it's cable with a station on every VHF channel. The Baltimore convention is a maybe--probably if I make it I won't make IRCA and NRC, and vice-versa. In the summer I will be at a location less conducive to DXing--Teaneck NJ, about 10 miles from the NYC stations. Having no rotor, just the whip antenna on the Sanyo, it'll be rough to hear things. I'd appreciate a call from anyone in the NYC area who notices anything "going on" at 201-836-1137, that's after June 10 when I will be in NJ for the summer to visit my parents and family there."

Seems we have another member interested in videocassette recording--namely Hooper Phillips (P.O. Box 897, Gilbert, MN 55741): "I enjoy being a member and the monthly newsletters are very informative. Here's hoping we have an exceptional DX season. I would like to exchange videotapes of station IDs, samples of local programming and DX catches by videotape. I have the RCA VHS tape system, and can tape up to 4 hour tape cassettes. Tropo is picking up now that our weather is warming up (it was a long, long winter)--we noted Cedar Rapids IA on channel 7 this morning, for example. We also noted Park Falls WI on channel 36 as well. Location here is 200 miles north of Minneapolis and the stations there on TV and FM are improving 100% now."

Good to have Ed Brindle back in the club! He writes: "Thanks to your most recent flyer (a mailing to former members-jz), I finally found the motivation to rejoin. I enjoyed my previous 2 year membership. However, when it came time to renew, cars and school had priority over the VUD. After '11 (plus!) in car parts and etc., the money just ran out. Hopefully I won't have that problem in the future! Although I don't have the time to DX as much as I used to, I still enjoy it. Some parts of my DX set-up have changed, while most of my set-up remains."

Congratulations go out to Michael Koronka (324 E. 1st St., Gaylord, MI 49735), who just received his second class FCC radiotelephone permit. He's now working on the first class ticket, and we wish him all the best. He writes, "My DX activity has been low due to the fact that I am not home - only on some weekends. So when I am home in the summer I hope to get a few more FM verifications and many more logs."

Richard Clark (P.O. Box 273, La Vega, Dominican Republic) has some exciting news for us this month: "I started TV DX in 1950 and in 1969 I joined WTFDA, a really great TV DX club. But now I have gone into a new field of TV DX. I now have my own private satellite receiver!! That's right, I have become the 2nd person in this club to own one! My TVRO is 24 channels microdyne 1100 WFCXI (I have all crystals for 24 channels) and a 20 foot dish. I am using a 120 degree K LNA amplifier. This is really something else to DX on, when all TV stations are 22,300 miles away!! What it cost? Well, about \$10,000-\$12,000, but it's really worth it!!!" Congratulations Dick! Perhaps you could write a short article for us on what it's like using the TVRO in DR.

Member Roger Sabella (Box 2072, Chicago, IL 60690) passes along a note that Television Publications, Inc., has increased the price of its "Satellite TV Study Package" from \$10 to \$14. The package was prepared by WTFDA member Bob Cooper, and includes a 52 page booklet detailing home terminals, equipment sources, and pricing, a 22x35 inch wall chart showing the location of all satellite systems in operation, and a copy of Community Antenna Television Journal. Bob is editor of CATJ, the official publication of the Community Antenna Television Association. I have a copy of the package and recommend it to anyone interested in satellite TV. TPI's address is Suite 106, 4209 NW 23rd, Oklahoma City, OK 73107.

New member Jerry Hunt would like your suggestions on equipment, etc.: "Here is a list of my equipment- Panasonic RE7571 solid state FM/AM stereo, Radio Shack Archer 10 element FM antenna at 20' with rotor, and a Channel Master broadband amplifier 7035 FM/VHF. I am using the FM Atlas and have had fair luck in OK, KS, TX and CO. The most distant FM station has been about 175 miles. Everything within this circle I can receive, depending on conditions. Some of the stations are low power and they are a challenge to try and receive. I have a new local FM station here in Perryton TX, KETE 95.9. Sunday night is best for FM DX. KETE goes off the air at 10PM. After 10 things get much better! I need info on how to improve my reception. I would like to catch some of the more distant stations 500-1,000 miles away. I may have to go to a better FM DX radio than the one I have. I would like to find one with digital readout that does not cost an arm and leg to buy. Would like to find an SCA to install in my radio when I find the one that I will use. I may try stacking two FM antennas at 5' apart and see what that does for my reception. Does anyone know of any filters that I can install to cut back on noise and hash. I know that using the amplifier will cause an increase in db gain besides the noise that I receive. Would like some info on an attenuator that I could buy to help with this local station that is overloading my antenna. Turning away from the station does not help too much. The best I have found is to wait until they have gone off the air. Would like to find someone close to me to write to in my area."

Here's an interesting case that someone out there might be able to solve. We received the following letter recently from Kevin Jackson (44 Farnhill Crescent, Meanwood, Leeds, West Yorkshire, LS7 2QA, England): "I might have received a North American signal via an aurora, but I'm not too sure. The signal was seen between 0032-0101 GMT on Channel E3/A2. The sound spacing seemed like A2 and the video had heavy frame roll and the line was quite a way off lock, but this could just be due to the doppler shift, etc. It also had wide, dark hum bars on the picture. The transmitter was switched off at 0101 GMT, which seems early for North America, but I see that in summer Newfoundland time is -2.5 hour GMT, making it 2231 local time if it was Newfoundland, but that still seems quite early. I mention this as you may be able to help. If it was from Europe-Scandinavia I would expect to see more than one transmission. The signal I think was on programming, but with all the hum bars, etc., it was hard to tell. It also wasn't too strong." The reception was April 4, 1979. Bear in mind that daylight savings time hadn't started yet. I wrote him expressing doubts that it was Newfoundland, but I'm sure many of you could be more definite about it than I am.

Roosevelt Crawford has moved once again (address on first page of Mailbox). He writes: "I have moved to Fuerth, West Germany, which is a part of Muernburg. In February I bought a Sansui G22000 stereo receiver. Since then I have received AFN-FM 98.7 MHz from Frankfurt three or four times, and once late at night in 99. I can receive Stuttgart 102.4 all day with periodic noisy stereo. I might add that this is using an indoor T-line antenna." Keep us informed of your DX progress there, Roosevelt.

Remember, this column depends on your support. Feel free to send news and views about the hobby, except items that go into the DX reporting columns. Be sure to support the other columns as well. Thanks to the many reporters this time around for making this the largest Mailbox ever.

A last minute reminder- the ANARC convention is June 22-24 in Minneapolis. Hope to see many of you in Baltimore. It promises to be a great convention. See y'all next month.....73.....jz

AGC AND HOW IT AFFECTS TV DX

Every modern TV receiver has a circuit known as the AGC, or automatic gain control. This control circuit, which is usually taken for granted by most TV DXers, may be the least understood and most often ignored of those controls that are not normally operated by the DXer.

The purpose of the AGC circuit is to control amplification in the video RF and IF stages of a TV receiver. The AGC feature is necessary to prevent the adverse effects of too much signal, a common problem in areas very close to local TV transmitters. If you live quite close to a local station, you may be in a field strength area of several hundred thousand microvolts! This is an unfortunate situation for any TV DXer to be in, but without AGC, you wouldn't even be able to watch those same locals.

AGC makes it possible to design a TV receiver that can receive both weak and strong signals on different channels. If too much signal from local stations were the only problem, and if you only wanted to watch the locals anyway, a signal attenuator or "pad" at the antenna terminals would probably be the answer; but if you wanted to watch weaker (such as DX) signals, the pad would also eliminate them as well.

A receiver without AGC, or with a poorly-designed or malfunctioning AGC, would not lock into sync when tuned to very strong locals, or would show a very dark (very high contrast) picture, with some audio distortion possible also. Conversely, too much AGC compensation (too low an adjustment of the AGC level) will effectively reduce the sensitivity of the set, resulting in poor contrast on semilocal and weak DX signals, giving them a "washed-out" look.

The trend among TV set manufacturers these days is toward "idiot proofing" their products. This is the philosophy that there should be fewer and fewer controls to confuse the consumer. Thus, we now have features such as automatic fine tuning, VIR circuits (automatic adjustment of color), etc. However, while this trend may be fine for the average consumer (after all, it makes life less complicated for them), it's a problem for the DXer who now finds that the AGC is frequently no longer adjustable on newer TV sets. It seems that although the AGC control has traditionally been designed and located for accessibility primarily to the service technician, it too has become "idiot-proof".

Without adjustable AGC, the AGC action of a TV set has to be a compromise that may cost you some sensitivity. Fortunately, most of the better models have good AGC specs--the ones to watch out for are the cheaper models, such as the no-name discount store type of set that usually sells for an "incredible" price. These sets usually will have incredibly bad specs to match the price!

Some TV sets employ "keyed AGC"--this is a form of AGC that's only "on" during the brief interval when the horizontal sync pulse takes place. This reduces the effect of electrical interference such as power line arcing or atmospheric lightning on the AGC circuit. When such an arc occurs, it causes an AM noise pulse that the AGC might otherwise interpret as a stronger video signal, thus reducing the receiver's sensitivity. If you often have the problem of trying to DX E-skip while a thunderstorm is raging several miles away, keyed AGC can help you cope a little better with those static "crashes" visible on the screen.

AGC also helps you cope with signal fading, although the AGC action of most TV sets is not really adequate to deal with the often very deep, rapid fading encountered in some E-skip openings. It should be noted that TV DXing probably wasn't considered when most receiver circuits were originally designed, so it shouldn't be too much of a surprise to most TV DXers when they learn that what they're using their sets for is not exactly what the AGC circuits were intended to cope with!

AGC And How It Affects TV DX

In one form or another, some type of AGC circuit can be found in almost every modern radio or TV receiver. In radios, it's sometimes known as the AVC (automatic volume control). This is considered to be an essential feature in most communications receivers, many of which have selectable AGC modes to suit the type of signal (modulation) being monitored. In a communications receiver, the AGC function is designed to deal with a very wide range of RF signal input levels that can be found on a crowded band. For example, a communications receiver of good design can take a range of signal strength levels of from just over 3 microvolts to 100,000 microvolts (90 dB of change) and compress it into, say, only 6 dB of change in the audio output stage. Simply stated, this means that the user of such a receiver will not be "knocked out of the chair" when tuning across a crowded frequency band of local and DX signals. Without the AGC, every local signal would appear to be many times louder than the strongest DX signal. With AGC, things are at least brought into a more tolerable range, if not equalized.

But what about AGC in television circuits? For the most part, it helps, rather than hinders your DX efforts. However, there are times when you are put at a disadvantage by this built-in feature. There are a wide variety of AGC circuit schemes in use by TV manufacturers, and while some of them are considered better suited to certain DXing purposes, all of them do have the same basic objective--to control gain in the IF and RF amplifier stages, thus preventing the aforementioned overload effects from strong signals. When you tune a TV receiver to a channel with no signals, AGC turns the amplifier stages up. With very weak signals, AGC allows the amplifiers to run "wide open" or fully on. But when you're tuned to a strong local channel, it allows little or no gain in the RF and IF stages--you don't need it. On most sets, the AGC is always in operation--you can't turn it off without modification. In some sets, this may not be worth the trouble, since most of the AGC circuit may be contained in an IC (integrated circuit) chip.

AGC works by responding to signal strength. The circuit "senses" RF input signal level, and adjusts the amount of gain in the RF and IF amplifiers accordingly. The stronger the input signal at the antenna terminals, the lower the DC bias voltage supplied to the RF and IF amps. Lowering the voltage to the bias circuits lowers the amplification of the input signal. Extremely strong signals require the least amount of gain. As in the example of the communications receiver above, a wide range of signals is effectively compressed into a much narrower range. This is why you don't usually have to readjust the contrast when switching from a strong local to one that may be marginally snowfree, when your AGC is operating properly.

You can make good use of this feature. By locating your set's AGC line and using a good VVM or high impedance VOM, you can have very accurate signal strength indication--which can be of great use for detecting signs of a DX opening before you can actually "see" it on the screen. Such an S-meter is also extremely useful for keeping your DX system up to par. For details on using your TV set's AGC in conjunction with a meter for signal strength measurement readings, refer to Dave Janowiak's *TECHNI-CORNER* column (VUD, October 1977, p. 21--available through the WTPDA Reprint Service).

There are some DX situations where you don't need AGC and could have better DX results without it. In particular, AGC has a big effect on meteor scatter (MS) TV DX. On most receivers, the AGC cannot react quickly enough to many meteor bursts. Since bursts are of such short duration--often a second or less--the AGC doesn't have enough time to adjust RF and IF amplifiers to maximum gain. A very weak signal, such as encountered in a MS burst, needs more time to properly "trip the AGC." This results in what amounts to a loss of sensitivity to signals that otherwise might be identified if the AGC could be turned off. This helps to explain why two TV sets, which may otherwise seem to have identical sensitivity, produce widely differing results on MS. Since there are different types of AGC circuits in use, some consumer TV sets are "hotter" for meteor scatter than others, while being of practically no difference when used for other DX modes. Some of the more avid and technically minded TV DXers have gotten around this problem by use of modified older tube-type sets. Larger, more elaborate antenna arrays also will help MS results on any television receiver. They can give you more bursts, and the increased gain can have the effect of increasing the length of the burst, too.

AGC And How It Affects TV DX

Different AGC circuits have dissimilar "reaction times" because the time constants are unlike. The time constant of such a circuit is determined by the values of capacitance and resistance, and with many different types of AGC circuits used by manufacturers, some are much faster in responding to changes in signal strength. For MS bursts, you'd need a set with a very "fast" AGC--but this would not be best for other DX modes. An AGC with a slower reaction time might be more desirable for certain types of signal fading conditions such as one might encounter with E-skip. Also, there are different types of fading characteristics encountered over troposcatter paths that would call for an AGC with variable reaction time to be controlled by the DXer who may have the desire to observe scatter-propagated TV signals over a period of time.

The presence of the AGC circuit in your DX receiver can sometimes pose an additional problem. Adjacent channel interference or "slopover" (as some DXers like to call it) from a local signal can sometimes "trick" the AGC into reducing signal strength. This is often the case in some of the newer all-transistor receivers, many of which just don't seem to have the adjacent channel rejection (selectivity) that used to be typical in the sets of the 1960's. To best avoid this problem, traps can be used on the local channels. Often even the simplest of traps, constructed out of T-line (such as twin-lead) will do the job. By concentrating on trapping out the video carrier of a local signal, you can reduce or eliminate the "slopover" on the adjacent channel to the point where the AGC will respond normally to weak DX signals.

Depending mainly upon how old your set is, you may have adjustable AGC level. Usually, this is a "set and forget" type of control, which is why it is primarily intended to be adjusted by the service technician. Typically, the AGC level control will be located on the back of the chassis--but it may be located in "odd places" on some sets. One such unusual location may be a small slot where the contrast control knob is located, accessible only with a screwdriver or alignment tool. Component aging may make it necessary to "touch up" this control setting from time to time. Touching up this control often improves contrast. You may find that the AGC, when set to the optimum point for viewing locals, may actually cause the weaker DX signals to be snowier than they should be. In this case, you'll have to back off on the AGC control so that reception on the weakest signals is at its best. This may result in a loss of contrast on local signals, but you can live with it. If the AGC control was not properly set in the first place, and it often isn't, adjusting it to optimum for weak signals should prove to be a big help for TV DXing.

Some sets have "local/distant" AGC switches. If you DX with one of these sets, it should go without saying that the "distant" position should be used for DXing. Unfortunately, the presence of this switch often indicates a poorly designed receiver! Poor AGC action may frequently be found in the "no-name" imports (the more well known imports are usually free of this), but keep in mind that AGC specs can vary widely even in the top-of-the-line domestic consumer TV sets. Probably the ultimate in AGC options can be found on a professional receiver such as the Conrac AV-128 series. This type of CATV/Broadcast-quality monitor receiver is more than worth its weight in gold to the avid TV DXer. The real DX value of this type of receiver, as reviewed by Morrie Goldman in the October 1972 VUD (p. 35), is the flexibility in areas such as AGC. On it, AGC can be turned off for maximum meteor scatter DX performance, or adjusted manually exactly to suit the DX conditions.

The purpose of this article has been to make the TV DXer aware of what the AGC feature is, and what it does. We'd suggest that anyone attempting to modify their set's AGC action should take care to know what they are doing. Without the proper service equipment and knowledge, you can cause many more headaches than you bargained for. The latest TV receivers clearly are not as easy to "soup up" as some of the classic receivers, and AGC is something that illustrates that point. If AGC action on a new set is good, you shouldn't have to worry about it for DXing purposes. If, however, you've acquired an older tube type-TV receiver to be used for DXing, don't overlook the AGC function when checking tubes. Don't forget--AGC is always on when you're viewing a standard consumer type TV. Make it work for you, to improve your DX results.

INTERNATIONAL NOTES from

Ken Simon
513 6th Avenue South
LAKE WORTH FL 33460
305-585-7415 after 5 pm!

RICHARD CLARK sends his greetings from the Dominican Republic and just casually mentions (in a letter received here 27 APR) that he has received the HBC! on ch B1 but this time he received CHILE on A2 with a test pattern. I wonder if this could be TE? He also sent along skeds for WTVX-12, WSVI-8, WBNB-10 and ZBTU-5. It is attached for your inspection... (If you run into recent—the last 6 months—TV or FM program skeds, PLEASE share them with us...I'll be more than happy to return them if you want.)

Richard also sends his list of DOMINICAN TV stations, which I've rearranged by CHANNEL:

CHANNEL-2
HIMQ-Santo Cerro
HIJB-Santo Domingo

CHANNEL-4
HISD-Santiago
HISD-Santo Domingo

CHANNEL-5
HISD-Alto Bandera

CHANNEL-7
HIN-Santiago
HIN-Cayacoa

CHANNEL-9
HIMQ-Santiago
HIMQ-Pico Isabel de Torres
HIMQ-Cunayasa
HIMQ-Santo Domingo

CHANNEL-11
HIN-El Mogote
HIWP-Santo Domingo

UHF CHANNEL-70
HIN-La Naviza

CHANNEL-12
HISD-Dajabon
HISD-La Descubierta
HISD-Pico Isabel de Torres
HISD-La Romana

HISD-Radio TV Dominicana
HIN-Rahintel
HIMQ-Color Vision

Tuesday's TV Listings

WTVX CHANNEL 12

6:00 A.M. Worship
6:00 Lites, Yaps and Yaps
6:00 Vagabond's Dream
6:00 Swampy Swamp
6:00 Swampy Swamp
6:00 Mr. Rogers Neighborhood
6:00 Villa Alegre
6:00 Swampy Swamp
6:00 Swampy Swamp
6:00 Swampy Swamp
7:00 The Best of the Best
7:00 Over Easy
7:00 The Wonderful World of Disney
7:00 Ques Pasa, T.S.A.?
7:00 The Shogakukan Show
7:00 Parole & Justice
7:00 The Best of the Best

WSVI CHANNEL 8

6:00 General Hospital
6:00 All My Children
7:00 Night in the Country
7:00 Charlie's Angels
7:00 Vegas
7:00 Inverted City TV
7:00 Sunset
7:00 City 50

6:00 Newsnight
6:00 The Price is Right
6:00 Young & Rubicam
6:00 Bullseye Band
6:00 Love of Life
6:00 Nightlight
6:00 Channel Two News
7:00 News
7:00 Jeopardy
7:00 Mike Winkler & Son
7:00 News Reunion
7:00 News
7:00 CBS Late Movie
7:00 Weekend Update
7:00 Sunday Night Live

ZBTU CHANNEL 5

6:00 News
6:00 Newsday
6:00 Club 100
6:00 Countdown
6:00 Comedy Tonight
6:00 Love Lucy
6:00 Peking Man
7:00 Newsday
7:00 Mike Winkler & Son
7:00 Sunset
7:00 CBS Late Movie
7:00 Weekend Update
7:00 Sunday Night Live

CHANNEL 13
HIND-Santo Domingo
HIJB- CP - in northern part

THANKS TO RICHARD for a good catch and the Dominican list. He now says he has a 20 ft. dish TVRO in operation too...

From GLENN JACOBS comes word he has photographed BBC-1 ch B1 on a British 405 line set. I don't have the photos yet, but we'll publish them as soon as they're in hand. JERRY PULIC's photos came out but are very hard to tell what they are. In one a man—somewhat humanoid shape—can be discerned...

KRITH HAMER in Derby UK reports no A2s yet in ENGLAND...Work goes on on Roger Bunney's A2 ZBS mystery and as soon as it's confirmed, we'll let you know.

GLENN 'MR. 2ND HARMONIC' HAUSER says he has word that BBC-1 ch 1 has been seen in AUSTRALIA...

THAT'S ALL FOR NOW, good DXing and how bout some reports?? 73s de KEN SIMON

by Mike Dorner, Jr.

There are great developments taking place on the educational part of the FM band this year, as many DXers are quite aware. Ten-watt (Class D) stations will no longer be authorized after the current applications on file are granted. By January 1, 1980, all authorized ten-watters, including those still to be granted, must either increase their effective radiated power to a minimum of 100 watts or remove themselves to a channel in the commercial part of the band. Finally, the days of the three-hour per day operations are over; the FCC has warned all non-commercial licensees that these must operate at least 36 hours per week, or face time-sharing orders.

Though these proposals have been kicked around for a number of years, along with the oft-suggested table of allocations for the 88-92 mhz part of the band, which has been shelved temporarily, the FCC now means business. There have been considerable protests, particularly from the college ten-watters and their organization, the Intercollegiate Broadcasting System (IBS), which opposed these items when they were first proposed to the commission, opposed them again during this rulemaking procedure (Docket no. 20735, Rule Makings 1974, 2655, and 78-364), and filed a petition for reconsideration. A background is necessary.

Ten-watters got their start after the second reorganization of the FM broadcast band had taken place, in 1948. Against some opposition from commercial operators, the FCC had stated that part of the band, 88-92 mhz, be reserved for non-commercial FM radio. Applicants were slow--very slow--in coming forth, and as late as the beginning of 1949, the commission was warning educational institutions that unless they began to apply for non-commercial facilities, the commission could not continue to deny commercial applicants these vacant channels. There were only some 60 construction permits issued by then and, to my knowledge, only about half had made the airwaves.

Quietly during this time, the FCC had authorized Syracuse University (New York state) to conduct experimental FM transmissions using a 2 1/2 watt transmitter--you read correctly: 2 1/2 watt--in the 88-92 mhz part of the band for educational broadcasts campus-wide under the call WAER. They proved tremendously successful, and in the summer of 1948, the commission opened up a new class of educational stations, Class "D" tenwatters, in the hope of instigating perennial cautious educationists to enter educational broadcasting. WAER was granted regular license, the first ten-watter on the air, and was quickly followed by WHEB of Havertown High School, Havertown, Pennsylvania--still on the air; WIAS New Albany, Indiana, Public Schools--still on the air, but with much greater power; WITU Ithaca College, Ithaca, New York, now WIOB and operating with greater power; and WFPL, Louisville, Kentucky, Public Library--still on the air, but with greater power after a local commercial FM went silent and donated its transmitter.

Remarkable also was the fact that, of the first dozen applications for construction permits, two were denied--the Bramwell, West Virginia Public Schools and the Fort North Baptist Seminary. The latter case represented the refusal of the Commission until very recently to grant educational licenses to church groups unless these were granted directly to church educational institutions. The FCC would soon decide that seminaries were eligible as licensees, but it did refuse the request of the Southern Baptist Convention of Texas to authorize a string of stations in that state licensed directly to the convention. SBC-Texas would put KBUX 107.9 Dallas on the air, later KIBS, but it soon went dark, while OP's for commercial stations in San Antonio (K3SB 105.7), Brownwood (KHWD 105.9), and KSWW 93.5 Dallas never got on the air. But ten-watters did operate at Brownwood's Howard Payne College (KHPC 88.1), Dallas' Buckners Orphans Home (KHOR 88.1) until the earlier sixties.

The big commercial explosion collapsed before the onslaught of television, the hijinks of the musicians' unions (they wanted double pay for AM-FM simulcasts), the mediocrity and unavailability of FM receivers (Mike Collins' parents unsuccessfully searched the whole of Bridgeport, Connecticut, for an FM receiver birthday gift), and the indifference of most broadcasters. It was the non-commercial station, most often a ten-watter, that kept FM alive outside the metropolitan areas; quite frequently it was the only station on the air.

In the slump of the 1950's, only 273 new FM authorizations were granted, 81 of which were non-commercial, and almost half of which were Class D. By 1957, of the 143 educational stations licensed, 63 were ten-watters. The year before had marked the turning point in FM growth; by 1963, 93 out of 196 educational FM were ten-watters. By 1974, over half the educational FM were ten-watters: 427 out of 807. In the meantime the Corporation for Public Broadcasting (CPB) had been erected by Congress to fund PBS and to organize public radio broadcasting. One of the immediate problems it had was to promote noncommercial radio in major markets where there was none. As late as the 1970's many major markets did not have what has come to be called public radio. But the ten-watters, chiefly but not always operated by colleges as rockers imitating the commercial top 40 and progressive stations, were cluttering up the band, as the CPB saw it.

It then offered a series of proposals to the FCC, most of which have taken form of the present FCC requirements. Let us look at what these are. First in importance is the demand that all ten-watters apply for an increase of power by next New Year's Day. Those who will not or cannot (because of existing short-spacing situations that cannot be relieved) must choose a commercial channel not in the table of assignments. The Commission dickered over allowing ten-watters to remain on their present assignments until an applicant requested its or an adjacent frequency. But the FCC felt such a solution would cause a great deal of uncertainty and confusion as to just when a given frequency would be available for higher-power operations.

To ease the fulfillment of the new rules, the FCC allows all present ten-watters to file for an increase of power to a minimum of 100 watts ERP (Class A minimum) by January 1, 1980. License renewals for present power will be granted until that date on a secondary basis. For renewals filed January 1 or after, an engineering statement and application must accompany the renewal application showing the new commercial frequency chosen. This frequency must be selected in a manner that no present vacant commercial assignment is pre-empted (a ten-watter in Podunk City cannot file for 92.1A if that channel is assigned to Munk City, nor can it file for 92.3, 92.5 or 92.7 for the same reason. A ten-watter may file for a class B or C channel, provided that the table of commercial assignments is protected.

The FCC claims that transitions to commercial frequencies are possible in all but the top three metro areas--New York, Los Angeles and Chicago--on the basis of a staff city-by-city study. Dr. Bruce Elvinghaus reported in his column that the twenty or so ten-watters in the Chicago area have banded together to file for high power stations in strategic areas to protect themselves. It seems to this author that this might be illegal; but more about that later.

If a ten-watter cannot find a vacant commercial frequency, it must apply for a new frequency created by the commission in the same rulemaking: channel 200, or 87.9 mhz. Many will recognize this as being at the top end of TV channel 6 and so it is. For this reason, and against the wishes of the powerful TV industry watchdog, NABT, in any event, 87.9 is available only in areas outside the grade B contour of TV-6 assignments, including vacant ones. The coastal islands of North Carolina, a sliver in central Kentucky, central Illinois and extreme southwestern Alabama but not Mobile are the only areas east of the Mississippi available. In the West, part of the Texas panhandle, northeastern New Mexico and southeastern Colorado, northeastern Arizona and extreme western South Dakota, Nebraska and Wyoming, desert Oregon, the western half of Nevada, but not Reno, and part of the Sierra Madre area in central California are available for 87.9 mhz use. Since there are almost no noncommercial FM assignments in these areas anyway, it seems to this student that the whole 87.9 mhz deal was a waste of time anyway. To my knowledge, based on studying Broadcasting through 1/79, and the Federal Register through 3/79, there are no applications for 87.9 mhz use at all except in the Washington DC area, which antedates this rulemaking and will not likely be granted anyway.

Supposing a move to a commercial frequency or 87.9 is not possible? Then the ten-watter must look for the least desirable non-commercial frequency to a high-power applicant and move to that channel after filing for it. This is known in FCC parlance as the least preclusionary option. Suppose in this case that such a fre-

quency is occupied by, or is adjacent to a frequency occupied by, another station. Then the FCC will put both into a hearing, deciding in favor of the station "which would more effectively respond to a community's need for expanded educational stations." But no ten-watter will be allowed to cause interference to the 1 mv./m. contour of another station; further, no ten-watter will be protected from any interference except from another ten-watter.

What if none of these moves is possible? Then it's curtains for the ten-watter. It will be interesting to see, over the next several months, which course the present ten-watters will take; careful reading of Dr. Living's column and the use of the EFM Station Directory will make possible a cliff-hanging adventure to see which stations rise, which move and which survive. Now, what about the Chicago ten-watters? It is my understanding that the filing of an application to prevent competition in any form is illegal and places one's own license in immediate jeopardy. I have read one report where the FCC failed to lift a southern AM license only because it could not prove that the owner had supported a local FM application by another party in order to keep competition from a nearby AM out. There are many rumors, of course, of local AM's filing for FM OP's and then sitting on them for years in order to keep competition away. If these cases are discovered and proven, the quill-tine blade falls. It seems to me unwise a move on the part of the Chicago ten-watters. There is the unenviable lot of being located in a metro area where the band is saturated, both commercial and non-commercial, and there is nowhere to go. Some of them will surely die.

But the ten-watter that moves to a commercial frequency does not have it "made," either. His is a secondary service; while it can bump a translator service on a channel if that is the only one available, he is not immune from bumping himself by anybody else, not even another ten-watter. Here's an example: Supposing Overhouse University's imitation rocker, WOG, moves to 106.5, the only available channel. A year later, a commercial interest in nearby Hotshot Creek wants 106.5 assigned there, and it is the only available commercial channel. If the FCC agrees on the basis of the greatest good to the greatest number, which it almost always uses, then WOG's days are numbered. Or supposing a local group wants 106.5 assigned for commercial use, and the assignment is technically possible. Again WOG's days are numbered. Supposing again that local Dipper Creek Community College's ten-watter WIT is about to be bumped by a local community access group that wants to put Radio Free Dipper Creek with 200 watts using a borrowed transmitter and 1949 studio equipment. If WIT can prove to the feds that it offers a better community service than WOG, then 106.5 goes to WIT.

There are two and only two exceptions to these rules about ten-watters: first, the commission will still accept ten-watt applications from Alaska, following a special pleading from the Alaskan Public Broadcasting Authority. Towns are very very small, and all but Anchorage and Fairbanks can be placed easily within the Grade A contour of a ten-watter. The usual lack of any residents outside city limits for hundreds of miles, literally, precludes higher power. Secondly, treaty provisions prevent the FCC from moving ten-watters within 200 miles of Canada and Mexico, but the commission is working on these matters now. Other than these two, there are no exceptions.

Applicants still waiting in line can immediately amend their applications for (a) higher power, or (b) another frequency in either the commercial or non-commercial band. This explains why the FCC has lately made some perposterous assignments, such as WOCX 88.1 Waukesha, Wisconsin, a channel 6 city. Waukesha College has never gone on the air, and is applying for 104.5 in the Milwaukee metro area. LSU in Baton Rouge has amended its application for 107.3 even before it received its OP. There will be many such. Already, no small number of stations has filed for higher power. We'll see more as time grows shorter.

Space prevents me from elaborating on the time requirements. Basically, the FCC was tired of seeing frequencies lying fallow except for a few hours a day or, worse, a few hours a day weekdays only, school sessions only. Yet many licensees balked at the cost of operating more hours a day, more days a week. Many different suggestions were offered. How the feds answered the problem will appear next month.



FM NEWS

Bruce F. Elving, Ph.D., Editor
18½ East Fifth Street
Duluth MN 55805

New FM Stations Granted

CA Carles (near Modesto) *89.5 10 w. Bet Nahrain
CA Chusler (36-34-47, 125-26-37) *88.7 3000
h.v. 133' Central Coast
CA San Rafael *88.1 10 High School
CO Burlington 104.1 20000 h.v. 360' km. l
GA Homerville 105.5 3000; 360'; m
MA Acton *88.1 10 Schools, previously
reported erroneously as a grant; it is only now
being granted.

NY Patterson 105.5 1100 h.v. 480'; s
AT Edmonton 98.3 100000; sp
IN Sadsbury 105.1 100000
SA Swift Current 94.1 180000; l

Call Letters Assigned

AZ Phoenix 94.5 KQOL-FM (from KQOL-
FM, AM adjacent now has different call letters)
CA Altamont *88.9 KMAH
CA Simsbury 107.1 KQKQ (KZEN)
FL Miami 107.5 WGBA-FM (WJOK)
GA Adel 92.1 WDDQ
GA Buckhead 94.9 WKUB
GA Dublin 92.7 WKZZ (WXL-FM)
HI Honolulu 97.5 KDUK (KHSS)
ID Payette 108.1 KWJL
IL Freeport 98.5 WXXQ (WFNL-FM); r, now
ID as 99-X.

IL Wilmington 105.5 WLMT
IN Elkhart 104.7 WFRN (WXXA; still "FM
105.7")

IN Greenfield 98.5 WKCS—now changing to
WDFM from WSMJ, a, "Kin-88, Indianapolis
radio station." Thanks to about four reporters
who called this change to my attention!

IA Clarinda 106.3 KQON (KQON)
KY Lebanon 108.9 WLSK
MA Pittsfield 105.5 WDEC-FM (WQRB)
MO Warren 97.7 KAYO
OR Gold Hill 108.3 KWWO
OH Portland 101.1 KLLS (KYTE-FM)
SC Myrtle Beach 92.1 WXTL (WNYG-FM)
TN Lexington 98.3 WZLT (WDXL-FM)
TX Loveland 106.5 KNOC
TX Terrell 107.1 KTLA-FM
UT Spanish Fork 106.3 KTMP (KON-FM)
VT Castleton 107.1 WTVR
WV Milton 108.3 WKST FM
OH Columbus 94.9 CKOT (CKOS)

Dual-City Identifications

OH Celina WGSN 98.7 adds St. Marys OH
OH Wapakoneta WAXX 92.1, WAX-FM 92, with
St. Marys OH; both of above still monophonic.
SCA (767 kHz) News

IA Carroll KKRL 83.7 (X data only)
IA Sioux City KJCM 95.5 FX, AP Audio on radio,
no longer carrying ABC Entertainment news.
NC Charlotte WFAE *90.7 to have talk (instruc-
tional programs and talking book) by April '90.
TN Oneida WBNT FM 105.5 no SCA, or its
former music SCA is inactive.

MEX CO Tijuana BCN XHRS 104.5 music

AS you hear DX, take note of stations
with changed music formats, networks,
nonIDs or slogans, and new stations, whether stereo or not, and report to this column.

Facilities' Changes

CO Steamboat Springs KBCR-FM 95.7 870 h.v.;
FL Mt. Dora-Orlando WORJ 107.7 70000 h.v.; 700'
IN Goshen WGSX *91.1 7700 h.v.; 87' 33 m sec.
KY Middletown WM/K-FM 92.7 130 h.v.; 1448'
KY Murray WKMS *91.3 100000 h.v.; 000'; has a
mysterious SCA!

NY Gouverneur WGS-FM from 92.7 to 95.3, with
92.7 assigned to Ogdensburg NY.
PA Chambersburg WKZZ ("Wory") 95.1 50000
h.v.; 230' 38 km primary signal radius.
PA Indiana WIUP *98.1 (from "91.3")
PA Pittsburgh WYEP *91.3 (from "91.5 1700
h.v. 520)

WA Pullman KQOO 104.9 3000 h.v.; 275'
WA Tappanish KENE-FM 92.7 2000 h.v. (1-35)
ON Sault Ste. Marie CHAS 100.5 8700 (1037)
PO Bainbridge CBM-FM 93.7 (from 99.7)

Formats/Networks

CA Fremont KFMR 104.5 Spanish (from sj)
GE Rahoboth Beach WLRB 92.7 m (from r)
FL Jupiter WRYZ-FM 96.7 m (from mj)
IN Monticello WVTI 95.3 msk
IN Richmond WOLK 96.1 k (from mj); Q-Country
IN Wabash WKUZ 95.9 k
IA Perry KDLS-FM 104.8 k (from m)
IA Spencer KICD-FM 107.7 msk
KY Bardonia WYWF-FM 92.5 km

PA Allentown KQBC-FM 101.1 msk; "FM-100"
has morning FM-only farm news.

WA Astoria KAUS-FM 98.1 k (from m); "FM-100"
has morning FM-only farm news.

WA Chequamegon WKLC-FM 108.9 m (from km; now
mainly separate from AM), 8, 1.

WA Rochester KRCC-FM 106.9 reported to be r
or msk r (from m), still NBC. Format change
not confirmed as of this deadline date.

WA Tacoma KESY-FM 104.5 m (from rm)
NY Endicott WMBV 105.7 r (from rm)

NY Lake Success WTFM 103.5 fm; has directional
antenna facing W 70°E; 3000 w maximum h.
3100 w maximum v. Protects NJ stations to SE
and SW (103.3 and 103.7).

OH Springfield WBLY-FM 102.9 sp, strict nonID
"FM-103," but some strict dual Dux are re-
quired to give legal call letters on the hour!

PA Carbonate WCDL-FM 94.3 fm
PA Easton WLEY 96.1 r (from rm)

PA Monticello WGLW 92.1 r (from rm)
PA Scranton WGBF-FM 101.3 r (from rm)

WEZX 107.1 r
PA Wilkes-Barre WRKC *90.5 sp
WRE-FM 90.5 msk, still old name,
celebrating AM station 100%.

TN Dayton WRFM 104.9 m
TN Etawah WNCX 103.1 k

TN Jefferson City WBBM 90.3 kg [107"]
TN Lebanon WCDR-FM 107.3 k, "Music Country/
TN Sports WSMT-FM 105.5 rock

WV Morgantown WVAQ 101.9 sp, "Album 102."
WV Parkersburg WBSZ 99.3 Y (from AJ), "89-Z"

WV Midway WYMS *88.9 r (late at night) msk.
ON London—99.3 French; r, no stereo.

PQ La Pocatière CHGB-FM 102.9 msk

NonIDs or Slogans Often Used

DE Wilmington WSTW 91.7 Rock (was Rock-94),
DC Washington WRQX 107.3 hard r, "D-107"
FL Fort Myers WHEW 101.9 The Country Giant
FL Melbourne WYRL 102.3 Music City 102
FL St. Petersburg WQYK 98.5 FM-89
WWSA-FM 107.3 Stereo 107

and "Bry" (as in Tampa Bay)
FL Tampa WJWY 100.7 "Jay" and FM-101
GA Brunswick WSB 100.7 1-100

IL Chicago WNLB 97.1 "Classical 87"
IL Elmwood Park-Chicago WKFM 105.9 Stereo
106, heard during "night jazz" and soul
programming.

IN Fort Wayne WKKE 103.9 "Album-104."
OH Akron WDDO 98.5 "Yellow rock 98," but
with calls used frequently.

OH Johnstown WWWW 103.1 3-WJ
PA Reading WRFY 102.5 Y 102, still m
OH Sylvania WGLZ-FM 97.1 FM-87

OH Kingston CDFY 98.3 Y-86
Stereo added

CA San Diego KITT 105.3, now r
IN Winchester WUCC 98.3 r (from m)

IA Sioux City KTFC 103.3
NE Norfolk KNEN 94.7 msk; E One Paul Harvey-
NF St. John's CHQZ 93.9, r

NS Sydney CJCB-FM 94.9
[NS broadcast 100% msk]

Not Stereo

Abbreviations

c classical, e ethnic, g gospel, j jazz, k country, L
Latin American/Spanish, m all news, p progressive
rock, r all other forms of rock, s soul, t talk. Discs
is r or r. Networks: A ABC-FM, B National Black
network, C CBS, E ABC Entertainment, I ABC In-
formation, M Mutual, N NBC, P National Public
Radio, S Associated Press Audio, U United Press
Audio, Y ABC Contemporary (In course, ABC is
the American Broadcasting Company, CBS

to forget what their own initials stand for, or
least they never seem to use their full names on
the air. SCA is "Subsidiary Communication
Authorization" a multiplexing technique usually
at 67 kHz; from the station's center of frequency
by which more than one program can be sent out
by a single FM station. FM is "Frequency modu-
lation." AM "amplitude modulation." Powers given
are effective radiated in watts, heights are above
average terrain and are expressed in feet.

READERS' REPORTS

WJAP 93.1 Indianapolis has not yet gone
to 98.9 h.v. at 1020', but hopes to do so by
August. An engineer there told Steve Rink
that they may have to be somewhat discon-
tinued to protect a station in Ohio.

Florida's John Concha, getting ship, heard
WLPN 104.1 Orlando PM for 1½ hours
without an identification, which would be
illegal for WUPR! WDEU-FM 98.7 Macon

SC has a disc jockey who leaves the mic
open during songs, singing, talking to the
performers—strange!

John Combs also sent along an item from *Broadcasting* about XETRA FM Tijuana, Mexico, and how the San Diego stations are trying to prevent the Mexico-licensed station from getting syndicated program tapes from the U.S. And he sent an item from the April 23 issue of the same magazine (p. 65) about Henry Geller's plan to possibly reduce FM channel spacing from 200 kHz to 150 or even 100 kHz. Such a plan, however, takes no account of possible FM SCA interference and I have filed comments with the FCC opposing such a plan, and opposing the adoption of any FM quadraphonic system that requires a move of SCA away from 67 kHz (such as to 95 kHz). Dead line for filing such comments was May 16.

My contributor from Nelsonville OH, Paul Mount, says not only is he a contributor to the column and an FM *Atlas* reader, but as of 5/3/79 a WFTDA member. We come aboard! He thinks maybe I should have a separate category for disco stations to separate those from stations playing a mixture of rock and soul. This might be a good idea! Fred McCormack says he did make an error in listing the CBC French station in Brandon as 97.5; it is 99.5. "I was surprised to see the grant for a CBC station for Brandon, Brandon, Manitoba, is becoming the major source of interference for DX'ing out of Des Lacs, ND, actually adjacent to the stations which also have joint signals. I even listen to the AM relay on 97.9 which is clearer than any CBC AM signal and carries a lot of news and information. I have recently discovered that KAVS 90.1 The River Falls, MN, is listenable in Fargo occasionally. They are rock. KDSU #91.9 Fargo has excellent programming; from 11 pm to 2 am they are rock."

Ne Zank says KAAZ 95.9 Bethany, MO, on the air and DX ready 3000 h.v. 300' but not sure if stereo or not. WCMX FM 101.7 to change format to easy listening music and calls to WEZV, with new owners, Fort Wayne, IN.

A verification letter from WSAE #89.3 to Albert Ellis accuses him of having "some rather sophisticated equipment." WSAE is in Springfield, MA. A. Ellis says WBOE Cleveland has a special permit to run with dead air on the main carrier while offering SCA. After listening to their dead carrier "for hours," he heard "This is WBOE operating with special authorization for broadcast on 67 kHz information for the blind." They were leaving the air at 2:07 pm EST Saturday, after over two hours of dead air with no legal id.

WBST #92.1 Muncie signs off 7 pm because of interference with some TV sets in the neighborhood (so TV reception during prime time will be unimpaired). CBE FM Windsor has about the best Detroit area signal on FM into Kokomo, says Tom Come. He's on and heard them identify as "CBC FM." Speaking of other non-Ders, John Ebeing sent a tape of CBQH 100.9 Dryden, ON signing off without mention of calls via CBW (AM), Winnipeg. The previous night CBQH signed off with mention of calls via CBQ (AM), Thunder Bay. Two different operations feeding one station! Pierre Daigle, Sainte Foy, PQ sent a tape of the sign off of CBAF 14 Fredericton, St. John, NB 102.3. But only "CBAF Moncton" is mentioned on CBAF 14 nor mention of those cities, but Pierre says this is more complete identification than the station normally uses. Perhaps mention of my contest to the station (see VUD of two issues back) will spur them to give more complete IDs.

[Paid advertisement]

100.3	KLZY	\$V	M DES MOINES	IA	87000	1700	55	105
100.3	KXII-FM	\$V	RM COLEY	KS	100000	614 C4	39	83
100.3	KDZY	\$V	G TOPEKA	KS	100000	260 W	29	73
100.3	WKOA-FM	\$V	R HOPKINSVILLE	KY	100000	600 I	39	83
100.3	KRRV	\$V	K ALEXANDRIA	LA	55000	470 B	32	73
100.3	WHIC	\$V	R DEARBORN	MI	50000	400 UHFZ	30	70
100.3	*WCTS	\$	G MINNEAPOLIS	MN	80000	430	34	76

FM COMPUTER BONANZA!

Even though there'll be no new FM *Atlas* to help you with your 1979 FM DX'ing, you can keep on top of the latest station developments by having up-to-date computer print-outs. Arranged geographically or by frequency, you'll have the latest station information at your finger tips. Although out a little late to help with sk.p either or both of these lists will be a great boon to your tropo DX'ing. Spread the list out on a coffee or TV table, or a desk top near your receiver—and you'll be in business!

☐ GEOGRAPHICAL PRINT-OUT, entire U.S., Canada, Mexico, only \$7 if ordered before June 30. After that date, the cards will be sorted by frequency. All prices postpaid.

☐ FM STATION PRINT-OUT BY FREQUENCY. This has been what many DXers have asked for with the format of the FM *Atlas* not allowing space for program format information. After June 30 the cards will be physically rearranged so that a frequency print-out will be given. This listing includes program formats, networks, SCA, etc., and is also \$7. Please order by June 30 to qualify for this group rate running of the computer data. Canada and L.S. only, excluding L.S. territories.

☐ COMBINATION geographical and by-frequency print-outs, about 180 pages in all, yours for \$9.75.

☐ FM APPLICATIONS listed geographically \$2 extra when ordered with either of the above, \$6 when ordered separately. Covers U.S. and Canada, giving name of applicant and all other known data.

Order from: Bruce Elving, 184 East Fifth Street, Duluth, MN 55806.

Stations mentioned on the sign off of CBQH that John Ebering heard were a CBQX on 95.5 and a CBQL on 94.5, neither of which I have any listing of.

in Maryland. WTHM-FM 104.3 Baltimore has been sold to Heftel Broadcasting, and Nick Lemonakis is watching to see if any format change in their operation will ensue.

From south Florida: Ken Simon reports that WRMB "89.3 Boynton Beach is on the air 100000 h.v. 455 g. 87. He didn't get any information on 87.70 MHz communist FM stations. Sent it to Ken at his new house 513 S. 13th Ave. in South Lake Worth FL 33480. He has a tower up but no FM antenna on it yet. Dr. Richard Wood reports he likes it. He'll be attending the ANARC convention in Minneapolis June 22-24. I expect to give an SCA presentation on there with two team jobs. He's going to be in the process of installing an antenna and tower at his new location for WXYZ-FM 98.1 Jupiter FL. He says listening on 6 am to 2 am.

WBST Muncie will be signing off at 2 pm. Unit filters have been installed on all area TV sets that are getting interference from WBST "92.1. An article Ralph Strickland sent along probably applies to WWDS Muncie. "School Radio Stations have Minimum Air Time" stating that new FCC rules require educational FM stations to be on the air a minimum of five hours per day six days a week, but presumably not during summer vacations. WWDS and other stations might have to hire personnel to keep the stations on the air a minimum schedule. Personally, I think the new FCC rule is causing some Mississippian educational FM stations to be off the air. Mike Donner says WVLS "91.5 Jackson is off the air and has been off for some time. It is being given to the state educational television authority. WWSB "89.1 FM Jackson States requested the air and is denied. "A former member of WVLS "91.5 has been reported to be planning to start a station showing interest in the AM cum market. Current and former WVLS "91.5 members WWSB "89.1 FM Jackson is a reported talk in Columbus. I've seen a surprising report of the making of Mississippi commercial broadcasters' efforts to halt an FM operation. They don't oppose efforts of the University of Mississippi to buy a commercial FM on the air in Oxford in the sixties. It is not for nothing that Mississippi is one of the last backward states. For the states even by the fellow Confederate states. "NOT ON THE AIR" WXYZ "105.1" McComb MS. WWOZ "90.7 New Orleans permits program 101 and wants an extension. New Orleans Seminary and Xavier (black) want it for a sharetime period. They claim WWOZ has enough time 11.7 years to hold and shouldn't be given an extension. WWSB "89.5 Tampa is also not on the air. It is being given to permit a long time. In a previous WUD I did not do Mike's publications, just as I forgot to mention the items left to spell out Educational FM (Guide EFM) and Onda FM, both of which can be ordered from club HQ. See back cover of your WUD. Mike sent several EFM station program guides which will be analyzed and added to your collection.

We congratulate him and Mrs. Donner on the birth of a fine little girl early in April. We too, have a new girl, Kimberly Ann, born April 2, making it our third girl (no boys).

Getting back to FM, Vic Meris says WQQ "102.1 Providence installed a new antenna, with about a 15% increase in signal strength. WQAS-FM 105.3 has a strong signal in Spring City, PA before, but since about Jan. 1 it has dropped to about half of its previous strength with very noisy reception on the road even in mono. WQAS FM should have a primary signal of 24 miles and a secondary of 60 miles directional to protect WQOV 105.1?

Leo Boshl, Grand Island NE sent a news article that KOWH FM and AM have been sold to separate buyers, so expect new FM call letters there or at least a dropping of the "FM". The FM's soul format was to have ended as of now, but so far no word on what format KOWH-FM has.

From Ontario: Bill Outrage says in regards to CFMX FM 103.1 Colbourn Ont. "Every few weeks we are told that CFMX will be on next week. This has gone on for some three years now. The station still isn't on the air. The CRTC was to have evaluated the license if they were on the air by the end of 1976, but it has never come about. CFMX was dealing with a lot of concert recordings from Radio Nederland the week of the 100th. There was either music or nothing. The signal was very strong (as I'm only some 15 miles away) but there must have been trouble with the studio to transmit it, because there was a lot of static. I've also noted CKO FM 100.1 Toronto Ont. used to be 100 kw. hours 6 am to 3 am eastern time) but no official word from CRTC regarding this change, maybe the "100 kw" is CKO FM 2 type?

WVHM Salem MA on "91.7 is conducting a fund drive to increase power from 10 wats to 130 h.v. 78". Apparently it is the cost of new equipment that is preventing them from going up in power, having received FCC permission to do so.

WCRB 102.5 Waltham MA is experiencing an interesting problem, writes George J. Milson. "WCRB had an AM outlet WHET which I sold. However the AM tower is adjacent to the FM tower and there is some leakage of AM signal into the studio wiring. The Phoenix, a Boston paper, reported on this problem. Apparently the selling of WHET was also going to require the moving of WHET to a new location by the new owner. This did not happen and WCRB suffers in its signal even with Dolby which it uses." And "WVHM 101.7 Lynn was turned down on its request to locate its FM tower in another higher part of Lynn. They are now seeking a location outside the city."

Contributors: Walter C. Benson, Jr. Charlotte NC, Leo Boshl, Grand Island NE, T. Cornwall, Oquossoc PA, John F. Condit, Orlando FL, Thomas V. Connolly, Robinson NJ, Mike Donner, Jr. Milwaukee, J.A. Bill Outrage, Colbourn Ont, Albert M. Ellis, Bradford Ont, John Ebering, Bloomington MN, Dave Hassall, Portville IN, Joel Hargrove, Seabrook Lake IA, Mike Lemonakis, Baltimore MD, Fred McCaskey, Fargo ND, Vic Meris, Spring City PA, 19475, George J. Milson, Lynn MA, Paul Mount, Robinson OH, Steve Rush, Indianapolis IN, Kenneth R. Simon, Lake Worth FL, Ralph Strickland, Richmond IN, Richard E. Wood, Cape Girardeau MO, Neil Zank, Lincoln NE.



KC TV NEWS

John F. Combs*
2485 Ivan Ct.
Orlando FL 32807
305-677-0066

June 1979

CONSTRUCTION PERMITS GRANTED

Albany GA, Ch. 19-, 646, 970 (calls WJPT)
Valdosta GA, Ch. 44-, 562, 840
Baltimore MD, Ch. 54, 1510, 810
Abilene TX, Ch. 32*, 2040, 920

APPLICATIONS (* indicates requests pay-TV)

Vallejo CA, Ch. 66, 2526, 1596
" " " " 1790, 1609 *
" " " " 1141, 1592
Ventura CA, Ch. 16*, 4578, 2010
" " " " 1000, 615
" " " " 2944, 1420
Loveland CO, Ch. 22-, 3000, 1021
Gary IN, Ch. 56*, 3516, 1594
New Orleans LA, Ch. 20-, 2450, 1020 *
" " " " 5000, 495 *
Marlborough MA, Ch. 66, 100, 704
Lansing MI, Ch. 36*, 650, 976
Mount Clemens MI, Ch. 38*, 2140, 1073 *
" " " " 2690, 450 *
" " " " 2588, 613 *
Warren MI " " " 544, 1462 *

Reno NV, Ch. 21+, 794, 4997
Poughkeepsie NY, Ch. 54*, 3266, 1609
Greensboro NC, Ch. 61, 6.62, 559

CHANGE IN CALL LETTERS

WLWZ-7 Ponce PR (ex-WRIK)

CALL LETTERS ASSIGNED

Grand Junction CO, Ch. 8-: KJCT
Clearwater FL, Ch. 22: WOLF
Bismarck ND, Ch. 9 ETV: KAME
Bismarck ND, Ch. 3 ETV: KBME
Salem OR: A *3,22; D 3,*22
Toledo MI: A 43

CHANGES IN ALLOCATION TABLE (A=add, D=delete)

Angola IN: A 63 (**ETV alloc.)
Springfield MO: A 33
Salem OR: A *3,22; D 3,*22
Toledo MI: A 43
Jackson AL, Ch. 58 (WTLQ-41), 100
Chautauque Co. KS, Ch. 58 (KOTV-6), 100
Aitken MN, Ch. 64 (KSTP-5), 100
Fergus Falls MN, Ch. 55 (KTHI-11), 100
Worthington MN, Ch. 20 (KSTP-5), 1000
Grainola OK, Ch. 60 (KOTV-6), 100
Ponca City OK, Ch. 63 (KOTV-6), 100

TRANSLATOR CHANGE

W65AR, Loudonville OH, change primary station from WUSU-34 to WOUC-44

CHANGES IN NETWORK AFFILIATION

(See comments below...)

STATE OF THE INDUSTRY

(...is basically the same as last month with minor exceptions. Still no 1000th TV station on-air, but several CPs that are near ready!)

APOLOGIES first of all. I have been unable to locate copies of the March issues of Broadcasting, so there may be developments that I am currently unaware of. If you know of any, please write. (It seems the UCF library sent January through March issues out to be bound, which, if they are customarily efficient, will take until about 1986...)

THE FOLKS AT ABC are apparently still not satisfied with their current line-up of affiliates. **WATE-6** in Knoxville TN recently became the 200th primary ABC affiliate. NEC is the victim once again, and it is unknown at this time whether **WTVK-26** or even **WGPT-55** will pick up NEC. The effective date for this change is unknown. Meanwhile, in this editor's own back yard (propagationally speaking), **WTLV-12** in Jacksonville FL has announced their intentions to affiliate with ABC. Their current contract with NBC runs through June 1, 1980; however, the station hopes to switch much earlier than that if **WJWS-17** is willing to take on NBC, which they are not exactly thrilled about doing.

SEVERE WEATHER in the Wichita Falls TX area, including the now famous tornado that destroyed a sizeable section of the city, knocked all area TV and FMs off-air for several days. Only **KTRN**, an AM station, remained on during the crisis thanks to an emergency auxiliary transmitter. Ironically, the last words broadcast over **KFDX-3** just as they were knocked off the air, were those of the weatherman, who had just said, "take cover."

ROUND AND ROUND SHE GOES... An article in the June 1978 issue of Communications News, written by Dr. Matti Siukola of RCA's antenna engineering program, stated that circular antennas were being installed at **WPBT-2 FL**, **WRAL-5 NC**, **WTVY-4 IN**, **KETV-6 SC**, and **KBYU-11 UT**. We can add to these **WTVN-13**, **WESH-2**, and perhaps others. Hopefully, we will be able to secure an accurate list of all stations either presently using CP, or switching in the near future.

ANYONE SPEAK LAKOTA? It might help in the near future, for Lakota is the language of the Sioux Indians on the nation's second largest reservation, in Pine Ridge SD. The 14,000 residents there may get their own TV station, the first on an Indian reservation, if all the snags can be worked out. A \$100,000 grant from the U.S. Labor Department has been delayed due to paperwork problems, and the communications director recently quit the project. (Editor's note: I have no idea at this moment whether this is a CP yet or not; I don't even know what channel the application is for, but will try to find out for the next column!)

CANADIAN CCI. Residents of St. Brieux SK, where a new CBC French relay was built on Channel 7, are dismayed to find that the new transmitter is hindering their reception of **CFQC-8** in Saskatoon, some 180 km away. Numerous complaints from residents within a 30-40 km radius of the Channel 7 transmitter have yielded no action. This is because they are outside of **CFQC-8**'s normal coverage area.

AN INDIE FOR DES MOINES? Although no formal application has been made yet, owners of KPLR-TV St. Louis plan to establish an independent TV station on Channel 17 in Des Moines IA. The station, hopefully with calls KRDK, would be very similar in operation to KPLR-TV, and could come on the air within a year if everything goes smoothly. KPLR-TV's newscast ranks number one among all indies, and it's one of the most successful independent stations in the country.

IPBN No, that's not something out of the SALT II talks--it stands for Iowa Public Broadcasting Network. Midwestern DXers should be on the watch for IPBN's growing translator system. In addition to K3JAA Ottumwa, K3EAB Ft. Madison, and K5AAF Keosauqua, all of which are presently operating, look for K3JAB Sibley and K2JAA Rock Rapids, which will relay KSN-27, and K4AAB Keokuk, which will possibly relay K3EAB. (To the best of my knowledge, these are all 1000-watters!)

IN MINNEAPOLIS, the news as of late has been of KSTP-TV's defection to ABC after 30 years as an NBC affiliate. But WCCO-TV has made a move which should be of equal interest to the DXer. The station is now running CATV-like information on stocks, news, etc., between 0200 and 0600 local time. The information is run concurrently in different sections of the screen. This should make WCCO-TV an ideal PS target for those of you still lacking them in your logs!

NOTICIAS LATINAMERICANAS: Recent E-Skip to Mexico and the Caribbean here in Orlando have yielded some useful information. Mexico's Net-13 is apparently following Net-2's example of using more local IDs. The IDs are keyed at irregular intervals during regular programming, as there is still no breakaway from the network, and may indeed be carried by all Televisa relays, as well as Net-2. Recent reception of Radiotelevision Dominicana on Ch. 4 (Santo Domingo) has confirmed this transmitter as generally running a minus (-) offset. And WIPM-TV Mayaguez PR is now definitely linked to PBS via satellite--a fact they promoted extensively during breaks from a recent "live" Evening at Pops.

PBS GOES COMMERCIAL? Well, not exactly. However, a proposal the FCC is seriously considering involves allowing PBS stations to accept a limited amount of advertising to help their typical financial woes. The proposal calls for 3 European-style "clusters" of ads during the day, the total time of which may not exceed 3% of the station's total programming time. For a station broadcasting 15 hours a day, this would mean about 27 minutes total per day of advertising.

HERE IN SUNNY FLORIDA, such TV news is at hand. WESH-2 Daytona Beach has broken ground for its new 1740-ft. tower, replacing the old one at 1000-ft. The tower will be topped by a circularly-polarized antenna. The construction should take about one year and the move is estimated to reach 20,000 to 25,000 additional viewers.

Another new tower will be built by WTVX-TV Ft. Pierce-Vero Beach. The station was finally exempted from the county law which forbids buildings of more than 4 stories, with the argument that since the tower has no roof, it is technically not a building. The tower will rise some 1500 feet, and their recent application to raise their power to a full 5 megawatts will make them an excellent DX target!

WTOG-TV, carrying many Baseball games via satellite, has been extremely careful not to let any local IDs of the stations originating the telecasts slip through. They go so far as to keep the audio out after a break until the second play actually resumes. But often one of the announcers will be seen on camera at the end of the game with a "wrap-up"--and a jacket and microphone clearly labeled with the logo of WPHL-TV, WOR-TV, or whoever! As more stations carry these broadcasts, it could become very confusing to the DXer! And finally, WKID-TV in Ft. Lauderdale has decided to drop its evening religious programming and is reportedly planning to go to subscription-TV service in the evening only, complete with scrambled signal. No formal request has yet been made to the FCC concerning this proposal.

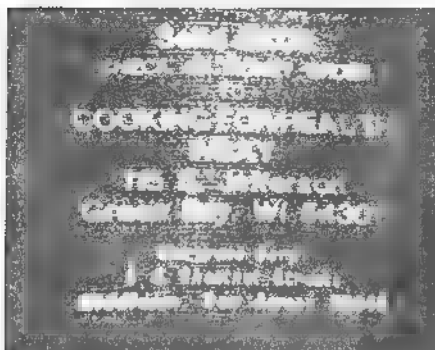
THE PROPOSED RE-WRITE of the Communications Act would keep the section concerning "private" services (i.e. SCA, satellite TV, etc.) virtually identical! I've been told that the section originally arose due to people intercepting ship-to-shore communications between investors and brokers, and using the information for monetary gain. However, this section, when applied to SCA, satellite TV, scanners, etc., could be quite repressive to the DXer or hobbyist. You can send your comments to Mr. Chuck Jackson, chief engineer of the House Communications Subcommittee, or write Robert Goodman, 5129 W. Roosevelt Rd., Apt. 87, Cicero IL for more information. Comments could also be submitted to WFLA's Mailbox, as many are interested in the subject.

CONTIBUTORS galore this time include Randall Clark, Parkersburg WV; Robert Goodman, Cicero IL; Bill Heumann, Des Moines IA; Mike Hogan, Burnham IL; Walter Patton, Montreal PQ, Canada; Paul Petosky, Munising MI; Ken Simon, Lake Worth FL; and Mr. William Thompson, esteemed (?) editor-in-chief, Buffalo NY. I acknowledge all contributors, direct and indirect, whether or not I actually use the submitted information in my column. Many sent information of primary use to CATV buffs--information which I will not use unless I consider it useful and relevant to the hobby of DXing. 'Nuff said for one month?.....73, JOHN.
©1979 by W. J. Johnston

PHOTO-NEWS

Jim Alexander
4 Brook Mount
Parsippany, NJ 07054

June, 1979



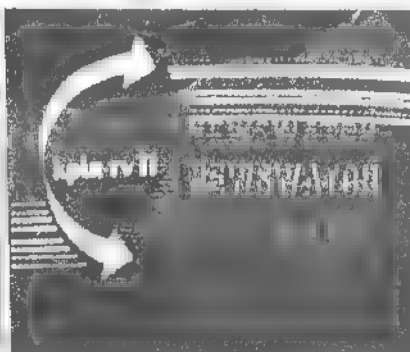
WBAY-2 Green Bay, WI
280 mile tropo (Gaines)



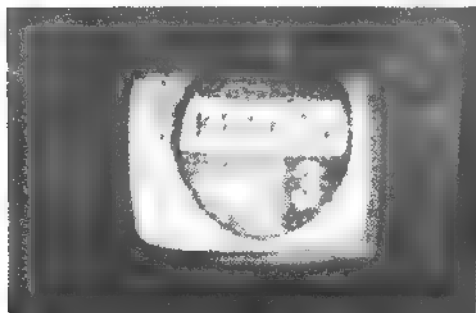
XHCN-2 Chihuahua, CH Mexico
965 mile F-skip (Pizzi)



WYEA-38 Columbus, GA
340 mile tropo (Combs)



KPLR-11 St. Louis, MO
430 mile tropo (Gaines)



KBTX-3 Bryan, TX
E-skip (Simon)

Contributors:

Paul Gaines,
Detroit MI

Jim Pizzi,
Orcutt CA

John Combs,
Orlando FL

Ken Simon, (photo taken at
West Palm Beach FL)

73 and good DX, *Jim*

SPECIAL REPORT

NOTES ON A LOGGING OF F₂ TV DX

WA5IYX
San Antonio, TX

April 17, 1979 2010-2044 z

re: South American Ch A2 F₂ reception



- had antenna nw still as CA Ch 2 Es in less than 30 minutes prior and noticed the weird fade-in of another signal (very poor video with low contrast, only the outlines of the highest-contrast items at first); a short time later it looked as though a horizontal resolution test pattern was being run (i.e., sets of vertical bars of differing size and spacing) (it later turned out that it was multi-path ghosting of the horizontal blanking period, the "side" frame of the video)
- as the video improved it was realized it was a Latin American soap opera, still thought to be Es from Mexico at this point the audio was turned up ... no audio.
- turned antenna s.e. and signal rose (though not as much as expected) and it finally got thru to me what was going on ... F₂ from South America.
(50-MHz had been exhibiting good F_o backscatter since 1930z or so and direct F₂ signals there had come from a maritime-mobile at 87w 7e as well as Ecuador and Colombia, but things there didn't look that super - like the March 8, 1970 magnetic storm that last brought in any Ch 2 F₂ (that time with audio but 4 or 5 stations))
- Ch 2 signal had very slow fading but the multi-path ghosting and smearing made the many high contrast Spanish words that showed up on video impossible to read, guess MUF into 57-58 MHz range but never even a trace of audio
- around 2040z a definite fade trend set-in with the signal literally dissolving around 2044z
- all the while this information was being announced on 28 385 MHz to see if anyone else was getting this, but apparently the information fell largely on unappreciative ears
- best analogy to the ghosting here is what is noticed with local UHF Ch 41 when the antenna is moved away enabling many multi-path signals to appear
- the TV is normally not run during the F₂ periods as the 40-45 MHz unshielded i.f. radiates badly into my nearby SX-62, so perhaps other instances of this may have been missed recently (if not for the earlier Es the set would never had been on at that time).

73, Pot
WA5IYX

p.s., obviously I'd like to hear about others who noticed this event (or similar ones at other times)

NORTHERN FM-DX

Ralph Strobel, editor
2510 S. McCalliard Rd.
Muncie, Indiana 47303
(317) 288-5815

Deadline: the 10th

June 1979

For FM DXers in Canada, the Northwest-Central states of WA OR ID MT WY ND SD NE MN IA MO and states east of the Mississippi River and north of the Mason-Dixon Line. All DX reporters from this area are encouraged to send me your FM DX loggings.

Roger Winsor - Box 463 - Hobart, IN. 46342

4/12 tr

0657 KFUD 99.1 MO Clayton c#
0700 KTJJ 98.5 MO Farmington mixing with
WACF/WXKX IL Freeport "99-X"
0745 KSCF 97.1 MO Florissant WNIB nulled
wZEN Alton, IL. Locally on the Chicago scene: All stations seem to have gone back to full call letters, with no more non-ID's. WNET has changed to AOR like WLUP, although WLUP bangs and crashes a little more since new owner took over. WKQX is rock now - adult BS (I presume you mean "Beautiful Songs?"-RS) rock. Total: 774, with best states: IL-134 and IN-96. 73's Rog

Paul Mount - 35 1/2 West Columbus St. - Nelsonville, Ohio 45764

RX: Sanyo AM/FM Stereo M 9980

4/10 tr/GW

1815 CKLW 93.9 OH Windsor
1817 WSAI 94.1 OH Cincinnati
1820 WZAK 93.1 OH Cleveland almost clear
1824 WNAP 93.1 IN Indy "FM-93" o/WZAK
1838 WQLK 96.1 IN Richmond
1840 WLGN 98.3 OH Logan - local-ughl
1900 WVNO 106.1 OH Mansfield m#
"springtime sound"

4/11 GW

0827 WBCQ 92.7 OH Bucyrus clear
0828 WMHE 92.5 OH Toledo fuzzy
0829 WPTW 95.7 OH Piqua-Troy
0830 WNCO 101.3 OH Ashland WRIA/IN under
1905 WBCQ 92.7 OH Bucyrus in \$ 1st time

4/17 tr

0512 WZAK 93.1 OH Cleveland s/on
0519 WNUD 92.9 IN South Bend Drake TC

4/23 GW?

0330 WLOT 104.7 OH Toledo's Best Rock
o/WTUE Dayton

From the cross, stations are just audible on the Sanyo, while on the Scott hooked up to the cable, stations are loud in stereo. Examples: WAMX-93.7, WKEE-100.5, & WVAF-99.9. No problem with local overload unlike the time I extended the Sanyo antenna in ex Manhattan line of sight to Empire state Bldg. and got distorted audio; that location also six blocks from WFR-106.7. Thanks for letter Randall Clark. 73, Paul

4/23

0340 WGCL 98. JH Cleveland fair-weak
0350 WOKV 103.5 OH Hamilton "All Disco"
0400 WWMH 105.7 OH Cleveland "M-105" p#
0411 WXEZ 105.5 OH Sylvania "Z-105" r#
0422 WVAF 99.9 WV Charleston "V-100" r#
w/WVUD Dayton, OH

4/27

GW Reception from Nelsonville Cross, about 200 feet HAAT overlooking city:
1905 WBAJ 104.5 WV Bluefield "\$-104" m#
1908 WDBX 103.9 OH Xenia rj#
1910 WCIR 103.7 WV Becklay "The Music FM-CIR"

1918

WUGO 7102.3 KY Grayson Trading Post, 474,286 tel. exchanges, "U-102" Rock, Reds Clinic 1924, "Sports active U-102", "UGO number one sports station" - spot for Grayson 1st national bank, so assume ex-WGOH-FM. Calls correct?

1938

WKRQ 101.9 OH Cincinnati "Q-102" r#

1945

WAMX 93.7 KY Ashland (on ground)

4/28

GW

1530 WSIP 98.9 KY Paintsville r#

Neil G. Zank - 623 Lyncrest Dr. - Lincoln, NE. 68510

Equipment: Pioneer SX-750 Receiver, Archer 10 element FM Yagi, GD Motor at 45 feet

3/1 tr

2230 KBRA 97.9 KS Wichita

3/22 tr

2330 KBEO 94.7 OK Oklahoma City

3/25 tr

2300 KNEN 94.7 NE Norfolk (testing)

4/18 tr

1230 KLEE 97.7 IA Ottumwa

5/1 1230 KAAN 95.9 MO Bethany

#####

JUNE 1979

Fred Nordquist - 7945 Boxford Rd. - Clay, NY 13041

Equipment: Heathkit RX AJ-15, with JFD LPL 10A Antenna at 45 feet less several elements lost in 70 mph wind storm. New underlined. Dashed indicates relog, with new propagation mode. DX from 9/4/78 to 5/1/79:

9/4 tr to west
0812 WCMU 89.5 MI Mt. Pleasant
0818 WHAD 90.7 WI Delafield c4/TC
0826 WBMU 89.1 MI Ypsilanti ID
0838 WBCB 100.1 MI Hastings r
0932 WMEF 97.3 IN Ft. Wayne "FM-97"
1025 KLIK 103.7 IA Davenport (prev. Es)
1029 WMBI 90.1 IL Chicago g4
9/29 tr
2306 WKAD 100.1 PA Canton r
11/8 tr
2200 CBCQ 105.9 OH Orrilia CBC Radio
(//CBCI)
12/20 Es to TX/OK MUF 103.7
1755 KERA 90.1 TX Dallas c
(Ed. note: Pete Sawatzky seemed to think the station in London, ON 73, Fred at 99.3 was a repeater of CJBC. You have calls of CFNG. Will you let us know the actual call letters, as I have heard this station twice, but no calls on the hour.)

12/20 Es cont'd:
1757 KNEZ 100.3 TX Dallas "EZ-100"
6151759 KVTI 91.7 TX Dallas g mono
3851801 KESS 93.9 TX Ft. Worth SS mx
4651806 KETR 88.9 TX Commerce RTSU
4901808 KKAJ 95.7 OK Ardmore
6001945 CFNG 99.3 ON London FFC-talk
4/4, 4/27, 4/28, 5/1 Au ex
1204/28
2145 WJFM 93.7 MI Grand Rapids nx/wx
4/28 GW
1802145 WFUT 92.7 NY Herkima "Y-93" Disco r
4/30 GW
13202148 CFMX 103.1 ON Cobourg o mono, testing

????????????????????????????????????????????????????????????????

Greg Monti - 5 Hickory Road - Bayville, NY 11709

Equipment: Pioneer SX-525 RX, Channel Master Stereo Probe 9 425 ft. w/relog

2/23 tr
2320 WQRC 99.9 MA Barnstable m4 w/WZRN
WQQQ 99.9 PA Easton m4 off in
WKEI 99.9 MD Ocean City r4 tech. dir
3/31 tr
2115 WPRB 103.3 NJ Princeton rs
2130 WSN1 104.5 PA Philadelphia km4
2135 WADB 95.9 NJ Pt. Pleasant m4
thru local
2140 WXXI 91.7 CT Danbury r4
2142 WPRB 90.5 CT Middlefield \$ telethon
2155 WSUB 105.5 CT Groton
2156 WBCN 105.9 CT Hartford r4
thru local
2156 WCCG 106.9 CT Hartford
4/22 tr
0000 WPRB 103.3 NJ Princeton
WVGK 102.9 PA Philadelphia r4
WSEH 106.1 PA Philadelphia m4
thru local
4/22 tr cont'd:
0000 WKDH 106.9 NJ Camden g4, close//WFME
94.7 on tape network
0001 WIOG 102.1 PA Philadelphia p4
0007 WJTV 95.1 NJ Atlantic City r4
WFRG 96.9 NJ Atlantic City m4
0009 WJRE 100.1 NJ Ship Bottom r4
0025 WCRB 102.5 MA Waltham p4
0032 WBBF 105.7 MA Framingham r4 "F-105"
0035 WSRB 96.1 MA Worcester m4
0040 WBGH 89.7 MA Boston c4 very low mod.
0057 WJIB 96.9 MA Boston m4
0132 WLEV 94.1 RI Providence m4
0133 WLVH 93.7 CT Hartford, semilocal
running OC all night!
0144 WUVE 91.3 CT Hartford p4
0202 WCCB 96.1 PA Red Lion m4 mono, WLEV
popped off in middle of CBS News.
0210 WLEV 96.1 PA Easton r4 "WEST-WLEV"
ID's back on.
new underlined, tentative.

Michael L. Hogan - 13910 Chippewa Ave. Apt. 1 - Burnham, IL. 60633

There has been no significant DX at this location since last summer on the FM dials. The few Es openings in January produced MUF's that nearly reached the FM educ. freq.'s; but no new loggings resulted. If any members have ideas about FM Apt. antennas for me, I would appreciate some suggestions. Total stations heard remain at 240. 73's and please report to the VUD often. Mike

From your Northern FM DX Editor: I couldn't believe my ears on the morning of 5/7/79. 2-skip was bouncing in from TX, LA, and OK! St. Louis stations were in as strong as semi-locals. It will be interesting to see if others found this skip and tr opening also. If so, let me hear from you.

Pro-o activity is noticeably improving as warmer weather approaches. I'll have a report of my own by next month. Until then, let's hope this summer is a great one for all of us.

73. Ralph 23

A NEW SEASON OFF TO A SLOW START

April went by as another month of little or no DX for most FM DXers. Evidently, those atmospheric gremlins that led to last year's suppressed activity are still with us as we enter this year's peak period for DX. Only one sure instance of E-skip was reported during April and early May. (Don't strain yourself Mother Nature, hi.) Efforts at tr were more rewarding though, with one opening extending 800+ miles, but tr that good was far from widespread. Conditions have to improve soon if they're going to be any better than last year. Stay tuned.

Randall B. Clark, Rt. 5 Dutch Ridge, Parkersburg, WV 26101 - Feb-May, 1979. DX up to 4/29

Hello! FM conditions haven't been as I thought they would be for this time of year. As you could guess the F2 has practically disappeared from the "low" PSB frogs! I'm pleased to swing a new member of WTFDA from WV. He's Richard H. Miller, Jr. (Dick) of Weirton, WV. (Way up north, HI!—about 35 miles west of Pittsburg, PA)

I reevaluated my station totals and I found out I do have more stations than what I thought I did!...around 235 stations...16 states & Canada. That's not too bad for being into FM DX for a year & a half now. I hope to be at the WTFDA convention this year—it will be a BLAST, I'm sure!! Here's to hoping that you snag that ever so elusive DX! 73's, Randy. (New underlined and all stations are tr.)

2/6
1554 WSGS 101.1 KY Hazard
1615 WOOH 102.3 KY Grayson
1618 WOKY 103.5 OH Hamilton, "103 1/2"
1832 WELA 104.3 OH E. Liverpool

2/13
1506 WNUF 100.7 PA New Kensington
1526 WCLW 105.3 OH Mansfield, "C-105", k
1600-2345 Most Columbus, OH stns in
(enhanced ex)

2/22
1126 WUGO 102.3, (ex WOOH w/new x format)
1127 WHEZ, WOKY, WRKY GOING (HEZ's at 103.3
but w/WOAH slopover!)
1133 WHEZ IDs as "Easy-103".
1926 WKKH IDs as "KK-FM"

4/2
2326 WESA 98.3 PA Charleroi, CLASS A FRQ!
2353 WTOT 104.7 OH Toledo, w/WTUE

4/3
0020 WNUZ 103.5 MI Detroit (not bad!)
4/11
0135 WIMA 102.1 OH Lima
0127 WHEW 102.7 OH Cincinnati (morn. hrs has
most Columbus, Cincinnati, Youngstown, Pitt.
FMs in quite strong, very good TR opening!)

4/21
0000-0230?observed WCLY-100.5 w/unmod carrier,
checking out thier SCA???, failed to ID at 0100!
0225 WMCW 104.7 MI Detroit (FINALLY!)

4/22
2059 WNUZ & WLOT-2145 WKKY BOOMING IN!
2236 WRIF 101.1 MI Detroit, but w/OOI from
WBRD 101.1

4/29
WZPR 100.3 (0123) hrd w/AM duplicate calls-WNNW
(Ah!, here's my mysterious "M-1500" unid. MCM
uses 1490KHz)

John P. Conks, 2485 Ivan Court, Orlando, FL 32807 - Late March to 5/6/79 (WV/EST)

Equipment: Scott Stereomaster 300-C tuner/amp (My perfectly functioning \$20 garage sale special!), Archer V-150 at 20 ft. on rotar; Blaupunkt portable AM/FM/SW used in car on car antenna cut to FM.

I'm finally getting into FM after about a year's of TV-DXing, which is still my first love. I find FM to be a challenge on tropo. It seems even more crowded than VHF-TV! I have a 10-el. FM yagi, but no place to mount it, so I'm using the TV antenna which is ostensibly for FM, too. 5/1, 2 and 3 brought three days of Latin American E-skip, but only into FM on the second when I noted it on car FM. If anyone is hearing E-skip on FM into my area this summer, please call my phone no., let it ring once and hang up. (Only 8 am to 11pm please!!) 73, John

777 Tr (Late March or early April)
0623 WSGF 95.5 GA Savannah 240
0625 WBEY 98.7 SC Beaufort 290
0639 WZLX 102.1 GA Savannah 240
0642 WZZL 103.5 SC Charleston, tent.
0648 WSCI 89.3 SC Charleston 310
0800 WMPR 88.1 SC Sumter 375
0800 WJPM 101.3 SC Sumter 375

4/4 E-skip
2150 KWGS? 89.5 OK Tulsa, tent. (brief,
Beethoven's 9th)

4/8 tr
0743 WMPR 88.1 SC Sumter 375
0855 WJPM 88.9 SC Rock Hill 435
0906 WZLX 106.3 SC Hilton Head Island 270
(My farthest Class A tropo)

5/2 E-skip (on car radio, times approximate)
1000+WUPR 104.1 PR Utuado 1170
1000+WQIZ 94.1 PR Mayaguez 1155
1000+WJPR 91.3 PR San Juan 1185

Rick Samford, 404 S. McNeill, Burnet, TX 78611 - April 4 to May 7, CST/CDT after 4/28
Equipment: Ken-ood KR-5470, 10 el. Archer FM at 24 ft.w/Alliance D-100 rotor.

4/5 (all tr)

1011 KPRA 105.5 LA Franklin, ID 420

4/7

0136 KRVS 88.3 LA Lafayette, ID 385

Does anyone know the current power of KRVS?
Heard "This is Public Radio for Acadiana"
along w/legal ID, in very weak s, so
doubtful if still 10w.

0151 KQKI 95.3 LA Bayou Vista, ID 435

0201 WTUL 91.5 LA New Orleans, ID 500

0214 WFL 101.9 LA New Orleans, ID

0216 WBYU 95.7 LA New Orleans, ID

0216 KZZQ 94.3 LA Golden Meadow 300

0229 WQXY 100.7 LA Baton Rouge, ID 435

0222 KTQQ 100.9 LA Sulphur, pas

"The Country Boss, Q-101"

0258 KRRV 100.3 LA Alexandria, ID 355

0300 KSMB 94.5 LA Lafayette, "K-94," ID

4/8

1117 KXPL 99.7 ODA Ciudad Acuna 190

4/16

0807 KSMB 94.5 LA Lafayette, ad 385

0811 KHOM 104.1 LA Houma, ad 470

5/2

1252 KHSP 99.7 EL Monterrey 365

"Radio Monterrey"

1305 KHRK 95.7 EL Monterrey, Sp. ID,

U. S. r, mono & not 96.5 as in FM Atlas.

5/3

0047 KTTT 88.1 TX Lubbock, ID 290

5/7

I didn't get to tune in til about 0030 so I
can only hope that not much was missed.

0044 WZZI 105.9 TN Memphis, ID 570

0058 WYJC 89.1 IL Mt. Carmel, ID 800

0059 WYUR 91.7 IN Vincennes, ID 820

0114 WQWZ 95.1 MS Natchez, ID, 420

r, "2-95"

0159 WQKS 91.3 KY Murray, s/off 705

0208 KLPQ 94.1 AR Little Rock, ID 445

0223 KTKR 95.1 KS Wichita, town ment., 475

"T-95," album rock

0232 KXXY 96.1 OK Oklahoma City, 325

r; "96-X" w/legal ID

0339 KSSH 95.7 AR Little Rock, k, ex-KTIA

"96-Kissing"

0347 WDDI 107.3 IL Marion 720

(k, "4-3-D")

0400 KKKK 94.9 MO Kansas City, ID 605

0539 KINB 107.3 OK Poteau, ad 380

local 107.1 on at 0600

0600 KLAZ 98.5 AR Little Rock, ID 445

0723 KWGS 89.5 OK Tulsa, wx, 390 390

0729 KCFD 98.5 OK Tulsa, ID

0731 KBEZ 92.9 OK Tulsa, wx, "FM-93"

0734 KTFX 103.3 OK Tulsa, "103 KTFX Super Fox"

0742 KRAY 96.5 OK Tulsa

Danny Runtin, 1020 S. Duncan, Stillwater, OK 74074

My DX leaves much to be desired since I haven't caught a good opening since last June. Anyway, on May 6 to 6 to 9pm several of the Memphis, TN stations were coming in with s, about 2 on the 3 meter. That's from 400 miles away. I searched beyond Memphis for more and looked for St. Louis but to no avail. But that search bore some fruit when I caught a new station in OK "making equipment and performance tests" as they said with their ID. It was KQZI 105.9, Robert, OK noted at 1859, coming in weakly from 140 mi. Probably heard them again the next evening but not any more since. I hope the dx picks up soon or the season will be even worse than last year's. I'm not too worried about the outcome of the season though, since Es doesn't get going good here until early to mid June then, hopefully, it'll be hold onto your hats time.

It has come to my attention that a "strict monitor" is a station that only gives its legal ID at the top of the hour as required by law. I made an inappropriate response to reporter's question in the April VUD, according to Bruce Elving. Until next month, 73.

STATION BREAK

WTFDA Headquarters
Post Office Box 202
Whiting, IN 46394

WTFDA member ads only. 30 word or 3 line limit.

FOR SALE - Broadcasting Yearbook 1975, a bit beat up, but all pages there; as well as Canadian Broadcaster directory, 1978, both for \$3.00 shipped UPS (add \$2 for orders going to Canada). W/station addresses. Elving, Adolph MN 55701.

Your non-commercial ad can appear in the VUD free of charge! Got a piece of DX gear you'd like to sell? Looking for something? Advertise in STATION BREAK

WESTERN TV-DX

June 1979

Fred McCormack
Box 5221
State University Sta.
 Fargo, ND 58105

Deadline: 5th

This month's reporters provide more loggings of European F2 and a report from Pat Dyer of South American ch 2 F2. Es also as on the rise and hopefully will be strong by the time this is printed. I have seen Es most of the last week, but often very weak. It is probably a little better than average for Fargo in early May. There was a brief burst of promising traces here, but the continuing cold and rainy weather has not been very conducive to it.

New	New Mode	Tentative - t	Unidentified - unid.
Pat Dyer, 5315 Silvertip Drive, San Antonio, TX 78228			
CST			
<u>April 1979</u>			
4 Es 0830-1200 unids - 2,3	5 tr 0615 WMAU 17 MS 470	16 Es 1935-2035 unids - 2	
2000-	WAPT-16 MS 525	(possible link to TE)	
2210 unids - 2,4	6 tr 0525 KLTW 7 TX 280	17 F2 1410-1444 unid - 2	
2330-40 unids - 2	Es 1830-	(see description below)	
5 Es 2000-45 unids - 2	1900+ YSR 2 ES 1200	23 Es 0955-1010 unid - 2 ne	
tr 0520 KLTW 7 TX 280	(Es to S linked w/TE on 50 MHz)	1100-1115 unid - 2	
KNOE 8 LA 440	7 Es 2010- unid - 2 sw	1135-45 unid - 2 n	
0521 WJTV 12 MS 525	2030 KEWOT 2 JA 690	24 TE?2040-2105 unid - 2	
0522 KSLA 12 LA 350	8 Es 1305-20 unid - 2 ne	(very rapid fade, ee)	
0525 KTRE 9 TX 265	1331 KDIY 2 ND 1225	26 Es 0855 unid - 2	
0527 WLOX 13 MS 570	11 Es 1800-	0915 unid - 2	
0529 WAFB 9 LA 450	1920 unids 2-4 se	0935 WSJK 2 TW 1010	
0533 KPLC 7 LA 325	1820 TGV 3 GU 1120	1005-1010 unid - 2	
0544 KLFY 10 LA 395	1828 YSR 2 ES 1200	1040 unid - 2	
0559 KBWT 12 TX 275	14 Es 1745-	1100 WTHS 2 FL 1150	
0613 KFDH 6 TX 275	1900 unids 2-4 sw	1115 WEDUt 3 FL 985	
0615 WRBT-33 LA 450	1832 KEWO 2 JA 690	1140 WTVJt 4 FL 1150	
WMAE 19 MS 570	1950-	1258 WESH 2 FL 1055	
	2050 unids 2,4	1320 fade/outs	
		GU-Guatemala ES-El Salvador	

South American ch A2 F2 reception: at fade/in, poor video with low contrast, multi-path type ghosting; Latin American soap opera; antenna to s.e. 30 MHz had been exhibiting good F2 backscatter from 1330 or so and direct F2 signals there had come from a maritime-mobile at 87w 7s as well as Ecuador and Colombia, but things there didn't look that super - like the March 8, 1970 magnetic storm that last brought in any ch 2 F2 (that time with audio but 4 or 5 stations). Ch 2 signal had very slow fading, but the multi-path ghosting and sneering made the many high contrast Spanish words that showed up on video impossible to read; guess MUF into 57-58 MHz range but never even a trace of audio. Signal faded around 1444.

Some good trop during the period, but our trans-gulf results of by-gone years seem hard to come by now. Es off to a somewhat fast start until mid-month then a slump. High solar levels created situations where Es-TE linkage probable some evenings. Also, April 17 F2 event the first of its kind in 9 years. 73, WA5IYX

B.W. Battin, 4305 Pitt, Duluth, MN 55804

CST

<u>March 1979</u>		14 F2 1137 BBC1 1 ?	<u>April 1979</u>
7 F2 1215 BBC1 1 NI		1137 BBC1 1 ?	17 tr 2338 WDRF 39 IL 350
1215 BBC1 1 ?		1142 TF 1 ?	(All Rockford U's in)
1230 TF 1 ?		15 F2 1045 BBC1 1 ?	
8 F2 1049 TF 1 ?		1103 TF 1 ?	

Finally, there will be DX again. Duluth's climate and geography being such as they are, there's about a six-month DX season and absolutely nothing the remaining half of the year. The season starts with Es in May, and as skip passes its peak, tropo starts, usually peaking in the fall. This year there was an exception though - F2. I heard French and British TV audio on several occasions during March. These stations, I discovered, pose some problems when it comes to figuring new loggings, and consequently, log totals. I was able to identify Northern Ireland as the source of one of the BBC transmissions, and because I received another station carrying another BBC program at the same time, I had two new loggings. But on subsequent occasions, who knows? Perhaps I received three of four BBC stations (or French stations); there's simply no way to tell. I increased my totals by three, one for Northern Ireland, one for other BBC, and Fr.

Richard M. Allen, Route 1, Billings, OK 74630

CST

Receiver: Panasonic TR3000P 3" B&W. Sony KV1212 12" color. Bearcat 210 programmable scanner (used with 100' long-wire for F2 reception).
 Aerial : Winegard 11 element log (VHF). Archer 44-element log (UHF)

February 1979

10 F2 0810-1220	17 F2 0838-1358	4 Es 1915 XEFS 3 WL 746
BBC1 41.5	BBC1 41.5	2316 XEW 2 DF 1150
(B-1 audio)	0913-1322	8 Es 1158 KEYS 3 CA 1255
0908-1154	TF1 41.25	1224 KNXT 2 CA 1174
TF1 41.25	1016-1304	2049 unid 2
(F-2 audio)	BBC1 45	(PBS not // WUNC
0944 BBC1 45	1145 BBC1 41.5	possible WSJK?)
(B-1 video)	Divis	2049 WPMY 2 NC 1007
11 F2 0845-1230	18 F2 1013 BBC1 41.5	WBTV 3 NC 957
BBC1 41.5	19 F2 0756 TF1 41.25	WUNC 4 NC 1050
0857-1241	0913-1230	
TF1 41.25	BBC1 41.5	<u>May 1979</u>
0927-1002	1044 BBC1 45	2 Es 1925 XEW 2 DF 1150
unid 48.25	BBC1 41.5	1933 XEZ 3 QR 1069
(E-2 video)	Crystal Palace	
0929-1002	(QSL rec'd)	
BBC-1 48.25		
(B-2 audio)	<u>March 1979</u>	
13 F2 1009 BBC1 41.5	3 F2 1105 TF1 41.25	
14 F2 0903 BBC1 41.5	<u>April 1979</u>	
15 F2 1000 BBC1 41.5	4 Es 1800 XEW 2 DF 1150	
16 F2 1001 BBC1 41.5	1800 XEZ 3 QR 1069	

I have read that the loggings of E-2 video signals in the southwestern USA may have been of a station in Rhodesia. I would be interested to know how one could possibly come to such a conclusion when there was simultaneous reception of BBC1 (B-2 audio) on the same frequency, 48.25 MHz. I have several recordings of the February F2 TV reception, including one of simultaneous E-2/B-2 reception on 2-11-79. The best F2 reception noted here was on 2-20-79. I noticed Es reception into the FM band on 2-10-79, but I misplaced my log for that date.

I was unable to do much monitoring on 2-2-79 due to a severe local thunder storm during the early evening. I had hoped the Es activity in early April was the start of a new season, but it did not continue. The small Panasonic receiver is an outstanding DX machine. It is battery powered with an electronic tuner and fantastic gain. Also, it has a built-in AM-FM radio receiver.

Until later, good DX -30-

Fred McCormack, Box 5221, State University Sta., Fargo, ND 58105

CST/CDT

April 1979

21 Tr 0959 KTTX 10 MW 310

May 1979

4 Es 1120 unid w ch 2
 5 Es 1330 unid NBC s ch 2
 1929 KETS 2 AR 890

5 Es 1944 unid NBC ch 3
 200' WBRZ 2 LA 1185
 8 Es 1945 unid ABC no ch2

Hopefully much more next month.

STATION BREAK

WTFDA member ads only. 30 word or 3 line limit.

FOR SALE - Realistic TR100 (Cat. # 14-927) stereo music system. Asking price: \$175 or best offer--plus shipping costs (weights approx. 40 lbs. uncrated). Albert S. Lobel, Post Office Box 26762, San Diego, CA 92126; (714) 566-0092.

WANTED - Am looking for Heath AJ15 or AJ1510 at a reasonable price!!! Write and describe: Ken Simon, 513 6th Ave. S., Lake Worth, FL 33405 or you can call between 5-8 pm: (305) 585-7415.

Your non commercial ad can appear in the VUD free of charge! Got a piece of DX gear you'd like to sell? Looking for something? Advertise in STATION BREAK

WTFDA Headquarters
 Post Office Box 202
 Whiting, IN 46394

EASTERN TV-DX

Bill Thompson
1907 Seneca Street
Buffalo, NY 14210

June 1979

Deadline: 5th

Except in southern areas, April was largely without TV DX. You can see the exceptions to this in Michael Hollis' and John Combs' reports. The April 8th through 10th period was especially good, when John caught North Carolina UHF and may have had Cuba and the Bahamas on highband VHF as well. Michael's loggings of stations from southern Georgia on the 10th and 12th, and Iowa on the 12th, were among the best spring trope reported so far--and take a look at his Louisiana and Texas catches in March!

E-skip seems to be making a fairly slow start as of early May.

Jeff Wolf 1131 University Blvd. W. Apt. 701 Silver Spring, MD 20902 (EDT)

August 1978 22 Tr 0959 WJII-12 NC 7 18 Tr 2137 UNID-44, 48
1 Rs 0026 unID-3 NBC 1011 CCI on W41AB October
0155 unID-2 ABC unID-44 w/CCI 5 Tr 0100 WPTF-28 NC
1210 unID-2 1015 unID-13 10 2200 unIDs 44, 23
1553 MUF ch 4 thru WJZ-13 11 0930 unID-33 WJPM?
1600 WVAR-3 FL 23 0907 WHER-15 VA w/ 18 Rs 2359 unID-2
1627 MUF ch 5 slight CCI 19 0025 MUF ch 5
5 2153 unID-3 PBS 0956 unID-23 WAKR? 21 1807 CCI on 2
7 1101 unID-3 CCI 24 0646 unID-29 22 2102 CCI 2, 4
8 1145 WTBS-2 FL 900 1007 unID-43 WUAB? 22 0100 unID-2
1234 MUF ch 4 26 1130 unID-11 WTVB? 28 2000 CCI on 2
"Cuba-3" 29 0412 WTVB-11 NC 235 2008 unID-3 Cuba?
0508 unID-36 "weak" 2310 "fade out"
10 Tr 0001 WITF-33 PA 0523 WHCT-9 NC 243 30 Times now EST
Hershey 90 0531 WHBT-13 NY 200 Tr 2359 WPTF-51 VA
Rs 1240 CCI chs 2, 4 Staunton 145
11 1230 KFXH-3 TX 1183 0648 WTVB-11 NC 31 0100 WPTF-28 NC
KOPT-3 OK? T 0730 WPTF-28 NC 0713 WHBT-36 NC 324
1401 KOKT-2 KS 1100 "ex WRDU" 0720 unID-12 WJII?
15 1838 unID-2 CCI 0900 WCTI-12 NC 269 1800 WPTF-28 NC 235
17 Tr 0323 WCBS-2 NY 200 September 1811 CCI over WITF
20 0259 WGHF-8 NC 9 Tr 0030 WPTF-28 NC 235 1900 WYIR-29 w/CCI
High Point 268 0244 WITN-7 NC 257 2210 unID-8 ABC
"Channel 6 loggings are infrequent because of interference from local FMs.
Channel 2 signal on August 14, 1978 at 0133 may have been meteor scatter.
I was using the monopole antenna that came with the set."

Michael P. Hollis 7401A Gardner Hills Ft. Campbell, Kentucky 42223 (CST)

February 29 Tr 0530 KTRV-39 TX 10 Tr 0530 WALB-10 GA
22 Tr 0419 WHIS-6 WV 350 Houston 675 Albany 400
0427 WJII-12 NC 0544 KRAL-6 LA WTVN-9 GA 325
Winston-Salem 400 Shreveport 460 WYRA-38 GA 325
0445 WRBJ-7 VA 400 0552 KTRK-13 TX 12 0555 KCRG-9 IA 430
0452 WQWK-13 WV Houston 675 0623 WGBH-10 IL 315
Huntington 300 0555 KRIV-26 TX 675 0625 WQAD-8 IL 375
0454 WCHS-8 WV 340 0558 WAPB-9 LA 0654 KOLR-10 MO 320
0502 WSLN-10 VA 400 Baton Rouge 490 0656 KIDU-40 IA 450
0521 KTVQ-3 MO April 0658 KMYC-27 MO 320
Ottumwa IA 400 10 Tr 0440 WMAZ-13 GA 350 0700 WLS-7 IL 350
0534 WBO-13 IA 480 0550 WCFB-41 GA WGN-9 IL 350
0541 KBQA-7 MO 310 Macon 350 WTTW-11 IL 350
WFLD-32 IL 350

March

29 Tr 0529 WTBS-3 LA Shreveport 460
"I'm only reporting 300 mile + stations since stations less than 300 miles are too frequent to be considered DX. I caught a duct on the morning of 29 March into Houston, Texas. I took some super photos of KTRK's (13) & KTRV's (39) test patterns at 675 miles."

Paul L. Gaines 15920 Puritan Street Detroit, Michigan 48227 (EST)

"Well this is what you were waiting for--hi! My DX report!!"

March

22 Tr 2256 CHRX-12 ON 270 May 7 Tr 0900 WJII-12 IL 305
"Hot weather here (80°+) and more to follow, but hard to get even South Bend now. Saw Pittsburgh 22 good enough for photo & saw Buffalo 7 sign off one night. No DX again today (5-9)?? What in hell is going on???"

John F. Combs 2485 Ivan Court Orlando, Florida 32807 (EST)

April																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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"The first 3 days of May brought the 'traditional' early May Latin openings to FL. The outstanding feature was on the 3rd, when at 1823 and again at 1856 EST our 'mystery' Met-13 relay on ch 4 keyed in their calls on the screen-IHAO. So we now at least know the calls, if not the location. The ch 5 transmitter, which was being seen during the 2nd IHAO ID, did not ID itself. So it now appears that both Met-2 and Met-13 (maybe others?) are using some local IDs, although not at predictable intervals. IHAO had a plug for some festival or other in the estado of Puebla, but I doubt that Puebla is the location of the transmitter. Oh, yes, Met-13 is full color now as noted on family net. (I have good IHAO photos). Another note: WJPM-3 is now running 'live' via FMS satellite for many programs, with slides promoting the fact often put on the screen. The only other Es seen was the off-season opening on April 4. At the 2200 ID on ch 3 I had KONT, KBNV, and WEDU all running parallel with 'live' FMS and each slightly offset from the other! My eyes may never recover, hi! Tropo has been good, but not spectacular. The expected long-haul Gulf ducting didn't show up again this spring, and it's probably too late now for it to happen. Maybe this fall...73s to all"

Robert S. Ross Box 4373, Station C London, Ontario N5W 5J2 (EST)

April 30 Tr ---- CBLFT relays May
 28 Tr ---- WENH-5 MI 150 on 48, 68, 78 7 Tr WJMT-12 MI, CW U's
 Not listed are Detroit U's (120 mi). Equipment includes Toshiba 12" portable, rabbit ears, 6" UHF loop. Present log totals 57, 28 verified.
 "No Es here yet. Tropo has been average for the past month. All DXing done with indoor antennas from 9th floor apartment."

David Leibold box 279 Blyth, Ontario N8M 1H0

"For Eastern TV-DX this report, here are my activities for last year. Not much Es, but whatever skip I saw added new entries into my 'log'--KATC-3 Lafayette, LA and WERZ-2 Baton Rouge, LA were received during the afternoon of August 11, 1978. I didn't see much else on E-skip last year, but a good tropo August 9th caused these stations to come in:

WRTV-6 Indianapolis IN just before 2100 EDT (QSL)

WTTV-4 Indianapolis IN just before 2200 EDT

WHTO-7 Dayton OH just before 2300 EDT

The rest was routine tropo (VHF stations within 300 km--about 200 mi.) which was mainly around September, when tropo could almost be seen to some extent every night. I've become busy at a number of things, so I'm not DXing as often as I would like to. With postage at 17¢, I'm QSLing once in a blue moon--which such expensive postage--hi. The equipment I use consists of Channel Master, mainly. A 75 ohm downlead from an antenna at 42 feet goes into a 2-transistor Channel Master amp to 300 ohm wall plate to a Rogers Majestic Modular 4 colour TV. The log is now at 86 stations. 73--"

Steven P. Sprachman Rm 335 Hotel Wellington 136 State St. Albany, NY 12207

"The answer to the question "Where is Steve Sprachman this Semester?" is Albany NY. Presently, I'm on an internship program through school where I work in an assemblyman's office (Assemblyman Murray Weinstein of Brooklyn). My work plus school work leaves me little time for DXing. Also the location of where I'm living doesn't help. And added to this, I have a roommate who watches TV constantly. What will he do when the tropo are good and I'm flipping channels every few minutes? This past holiday week was spent in Toronto. I have many relatives. One, Neil Wolfish, is a familiar name to BCB DXers. He's also good friends with John Zondlo (hi to John). I explained a little about TV DXing to Neil, but he's sticking to AM. Some TV news before I give my basic report: GE in Schenectady is merging with Cox and GE is selling WRGB-6. Stations seen here: WKLV-2 Utica (most times); WCBG-2 New York City (rare); WFSB-3 Hartford CT (most times); WNBC-4 New York City (most times); WABC-7 New York City (rare); WTNH-8 New Haven CT (occasional); WWLP-22 Springfield MA--first time seen tonight (April 18th); WHDH-24 Hartford CT (rare); WNYE-25 New York City (rare); WVER-28 Rutland VT (occasional); WVIT-30 New Britain CT (rare); WHTO-31 New York City (rare); WXTV-41 Paterson NJ (occasional); WJTV-47 Newark NJ (rare); WEDW-49 Bridgeport CT (rare); WJWV-50 Montclair NJ (rare); WNJF-52 Trenton NJ (tentative); WNJB-58 New Brunswick NJ (tentative); WTVG-68 Newark NJ (rare). "That's it--for now. Hopefully the DX season will start soon and I will have some better reports. Have a good DX season this year."

DON'T MISS WTFDA CONVENTION 1979.

BALTIMORE, MARYLAND-AUGUST 3,4,5.

VHF UTILITY DX

Pat Dyer
5315 Silvertip Drive
San Antonio, TX 78228
Deadline: 5th of month

JUNE 1979

Hank Holbrook, 7211 Chestnut Street, Chevy Chase, MD 20015 QSLed, GMT

2-21:
1928 KMA750 43.38 Sacramento, CA (Pacific Telephone & Telegraph, mp)
2-24:
1757 KMA628 39.82 Altadena, CA (300 w, cp) & 39.64 Lakewood
2-25:
2044 KME69 42.34 Stockton, CA (100 w, 2400' AMSL, sp)
2047 KMB34 " San Luis Obispo, CA (sp)
2-26:
2301 KMA801 42.12 Los Angeles, CA (sp) (100w)
2-28:
2316 29D3 42.12 Santa Barbara Co. (sp)
3-3:
1947 KIZ473 39.18 Prescott, AZ (110 w, cp)
3-4:
2012 KMA400 43.38 Los Angeles, CA (Pacific T & T, mp)
3-11:
1816 KMD64 42.54 Monterey/Salinas, CA (100w, 700' ASL, sp)
3-14:
2326 KMA392 39.7- Santa Rosa, CA (250w, 100', cp)
3-16:
2007 KME600 42.34 Dunsmuir/Mount Shasta, CA (sp)

cp-sheriff
mp-mobile phone
sp-state police

Michael W. Scheel, 3403 Jersey Ridge Rd. #224, Davenport, IA 52807
Bearcat 210 w/external indoor antenna; *Bearcat 250 w VHF Hi/UHF
ground plane antenna; GST ? April 12:

0559 KSC384 460.575 Springfield, IL-f* 0641 KSA776 42.44 Pontiac, IL-sp
0624 KTI589 155.340 " " -ho 0645 - 460.175 Chicago, "-p
0630 KSB213 42.66 " " -sp 0646 - 453.325 " "-lg

The first UHF from Chicago noted since August 1978.

Neil Dickerson, 426 State St., Sharptown, MD 21861 Realistic PRO-1
for low-band, Bearcat 12 for high-band; EST used

3-22: 3-29:
2000 ----- 156.80 Norfolk, VA (USCG) 1400 KOA346 39.18 Nogales, AZ-p
KGF340 155.37 Doylestown, PA-p 1409 KOA741 " Duncan, " "
2109 KIC443 154.19 Petersburg, VA-f 1415 KVT802 " Forrest Lakes, ""
2200 KVF429 161.10 Franklin, VA-rr 1422 KSN282 " Wikieup, " "
2206 KCJ259 161.07 Norfolk, " " 1440 KRT822 39.90 Roswell, NM-p
2213 KIP640 160.59 Portsmouth, " " 4-3:
2200 KYU794 161.10 Suffolk, " " 1815 ----- 156.80 Richmond, VA-map
3-24: 4-11:
1249 KMB435 42.12 Bishop, CA-sp 2130 KXC840 155.28 Chesapeake, "-ho
1256 KME355 " Yuba City, "" 4-13:
1258 KQN976 " Glendale, "" 1920 KEB600 154.16 Merchantville,
1300 KMG428 " Garberville, "" NJ-f
KFF493 42.08 Kellog, " " 1926 KIU628 155.28 Trenton, NJ-f
KDB680 42.34 Exeter, " " 2020 KYE994 154.37 NY, NY-f
1302 KME222 " Pulga, " " 2109 KTP975 154.28 Frederick, MD-f
1307 KJF557 " Tecata, " " 4-18:
1311 KDG889 " Gold Run, " " 0800 KDX246 155.28 Hagerstown, MD-lg
1316 KDE681 42.44 Bradley, " " (310 mi)
1321 KQY720 " Sonora, " " 2330 KXM724 156.21 Duquesne, PA-p/
1322 KFB975 42.50 Fremont, " " 2350 KIC469 " Norfolk, VA-p
1330 KME362 42.12 Arcata, " " 4-21:
3-28: 0015 KWX577 156.21 Richmond, VA-p
0847 ----- 156.80 Gloucester, NJ Camden, NJ-p
(USCG) 2100 KBM912 " Rocky Mt., NC-f
2200 KWX517 155.28

JUNE 1979

4-21: (rescue)
2300 KIK817 155.28 Stantonsburg, NC
2302 KWW679 " Raleigh, "ho
2330 KAQ518 " Bessemer City,
" NC-res. (400 mi)
2337 KVG740 " Columbia, NC-ho
2345 KWK694 155.22 Va. Beach, VA-ho
4-22:
0000 KDZ481 155.28 Phila., PA-amb
0030 KVN732 155.22 Hopewell, VA-ho
KIU470 155.34 Toms River, NJ-ho
4-22:
0053 KSO871 155.22 Elizabeth, NJ-amb
2000 KEF927 " Yonkers, NY-ho
KEG320 " " "
2030 KCN683 " NY, NY-?
4-23:
2100 KYO348 155.22 Trenton, NJ-ho
2130 KIS712 154.31 Thornhurst, PA-f
(amb-ambulance, f-fire, ho-hospital,
lg-local government, map-marine p,
p-police, rr-railroad, sp-state p)

(over 50 other trop loggings in MD, DE, VA, & NJ under 100 miles were deleted - pjd)

Now, my loggings. Hallicrafters SX-62, Hammarlund SP-600-JX-10, Allied A-2586, Realistic Patrolman (c. 1967), 2 30' long wires at 12' runs nw-se, se-sw; 4.96+ with Swan 250 + Ameco nvistor preamplifier, 5-el Cushcraft horizontal Yagi at 23' with rotor; F2 unless noted (bs=back-scatter; * Es, ** 2Es), daily MUF peaks noted, new underlined, GMT

4-6:
1945-2045 50 bs TX,FL,NM,TN,AZ
2115 50.76 New Zealand (TV audio)
2215 LUI DAU 50.1+ B.A.,Argentina-a
4-7:
0015 CE4CP 50.1+ Talca,Chile-a
0053 LU7FA " Santa Fe,Arg.-a
0103 LU7FSF 50 + " " " "
LU8AHW " B.A., " "
0117 LU3DCA " " " "
0123 LU3EX " " " "
0154 CE3TS " Santiago,Chile-"
0245 LU3HFU " Cordoba, Arg.-"
0257 LU7DZ " B.A., " "
0315 f/out of Es link to TE
1325 35 US ne, 1345 low-37 Canada
1725-1755 50 bs TX,OK
1802 LU8DIN 50.1+ M.delPlata,Arg-a
1840 50 bs CA,FL
1852 K4ERO/HCL 50.1+ Pifo,Ecuador-a
2103 50.75 NZ
2100 CX8BE 50.1+ Montevideo,Urg.-a
2125 LU3EX
2215 45.25 NZ (TV video)
2218 ZL1BPW 51+ Auckland,NZ-a
2325 ZL1BFA 52+ Whangarei, " "
4-8:
0230 VK--- 50 Darwin,Australia
1650 45+ Spanish
2100 45.25 NZ, 2110 50.75/.76 NZ
4-9:
1615 KOP303 35.46 Langley,WA-wp
1830 49.66 se, 2058 45.25 NZ
2202-0035 50.74/.75/.76 NZ
4-10:
1915 49.920 se
2145 46.25 Australia (TV video)
2225 45.25, 50.75 NZ
4-11:
1845 low-33 US, 2230 46.25 Aust.
2239 45.25 NZ
2325 LU9MA 50.1+ Mendoza,Arg.-a
2337 LU5EEM " B.A., " "
4-12:
0020 LU8AHW, 0025 LUI DAU
0035 CX8BE (Es link F2)
1830 35 US ne
1840-1945 50 bs TX,IA
1950 50.075/.125 Colombia-a
2225 45.25 NZ
4-13:
1950 KCC405 37.54 Bangor,ME-he
1956 KCA346 " Ellsworth, ""
2055 50.74/.75/.76 NZ to 2300+
2215 CX8BE, 2240 46.25 Aust.
4-14:
1505 hi-33 US, 1930 K4ERO/HCL
2125 50.75 NZ, 2210 45.25 NZ
2345 50.76 " "
4-15:
0259 LU8MBL 50.1+ Mendoza,Arg.-a
0302 CX8BE (Es link TE ?)
1259 KDC288 33.90 Hollis,NH-f
1300 KCA410 " Wareham,MA-"
1301 KDR298 33.86 Somerville, ""
1410 KDC353 33.70 Lancaster, ""
1815 35 US
1840-2300 50 bs OK,TX,OH,NM,MD,MO,
FL,CA
1920 K4ERO/HCL
2030 LU8AHW, 2035 LU3EX
2125 50.75 et al. NZ
2315 ZL3AQ 51 + Christchurch,NZ-a
2320 ZL3RW " " " "
2325 ZL3AN " " " "
2345 ZL3QR " " " "
4-16:
0035 45.25 NZ to 0200+
1930-2230 50 bs OK,TX,TN,CA,NM
2055 50.75 NZ, 2045 35 US
2120 LU3EX
2125 ZL1PCX/MM2 50.1+(110S,87OW)-a
2150 ZL1LV 51.11 Dunedin,NZ-a
2202 45.25 NZ, 2215 51 bs AZ
2230 46.25 Aust.
2255 ZL4LT 52.05 Dunedin,NZ-a

VHF UTILITY DX

JUNE 1979

(Dyer, cont.)

4-16:
2351 51.74 Wagga-Wagga, NSW, Aust.
4-17:
0045 50.74 NZ, 0100 50.76 NZ
0130 LU8BF 50.1+ B.A., Arg-a
LU3EX, LU9MA
0155 JELPCX/MM2, 1705 low-33 US
1858-2300 50 bs OK, MO, OH, TN, KY, AL,
AZ, FL, NC, TN
1945 JELPCX/MM2 (0708, 870W)
2010 K4ERO/HCl
50.075/.125 Colombia
2130 50.76 NZ, 2150 50.75 NZ
2230 51.74 Aust., 2225 50.74 NZ
2240 51.76 Melbourne, Vic., Aust.
(see TV report also this date)
4-18:
2110 50.74/.75/.76 NZ
2145 LU1DAU, LU3EX; 2150 LU7DZ
2205 LU8EEM 50.1+ Lincoln, Arg.-a
2245 hi-33 US, 2320 LU8AHW
2345 45.25 NZ
4-19:
0122 KLF527 35.22 Honolulu, HI-tp
2015-2135 50 bs TX, MO, OK, OH, TN
2020 K4ERO/HCl, 2112 LU3EX
2112 JELPCX/MM2 (0308, 870W)
2135 LU2BG 50.1+ B.A., Arg-a
2155 LU1DAU, 2210 CE4CP
2220 LU8AHW, 2239 CE3TS
2245 CE3DZ 50.1+ Santiago, Chile-a
4-20:
1350 30-31 US, 1950 49.82 Spanish
2225 45.25 NZ
4-21:
1505 low-30 Canada
2200 45.25 NZ, 2215 46.25 Aust.
4-22:
1955 49.995, 50 bs TX, OK
2035 46.25 Aus., 2055 45.25 NZ
2115 50.75 NZ, 2230 51.76 Aust.
4-23:
1820 hi-43 Spanish
4-24:
1520 low-30 Canada
1955 49.995 Spanish
2100 45.25 NZ, 2230 46.25 Aust.
2230 50.74 NZ, 2310 50.75 NZ
4-25:
0240 CE4CP (TE)
(devastating magnetic storm)
4-26: (slow storm recovery)
2325 low-30 Canada
4-27:
0005 40.68

4-27:
1429 BBC 30.80 Ascension Is.-ha
1955 30-31 US
2000 30.475 Espinal, Colombia (5th ha)
2105 45.25 NZ, 2150 LU7DZ
4-28:
1845 LU3EX, LU7DZ
1850 LU8EEM, 1900 LU3DCA
4-29:
2225 45.25 NZ, 2240 35.22 Spanish
4-30:
1515 BBC 30.80, 1805 45.30 Span.
2105 45.25 NZ
5-1:
1815 KFL943 35.58 Las Vegas, NV-tp*
2120 36's Spanish, 2125 45.25 NZ
5-2:
2103 KLF527, 2115 45.25 NZ
2200 KP4AAN 50.1+ P. Rico-a **
KP4EIT " " " " "
W4UWH/KV4 " Virgin Is. " "
2245 50 bs TX, 2305 50.75 NZ
2325 51.76 Aust.
5-3:
0003 KZ5NW 50.1+ Coco Solo, CZ-a **
0015 CX8BE
0025 50.075/.125 Colombia **
0030 LU8AHW; 0100 LU2BG, LU3EX
0103 LU3DCA
0107 LU6DLB 50.1+ B.A., Arg.-a
0116 LU1DAU
0130 LU4HFY 50.1+ Cordoba, Arg.-a
0235 f/outs
0225 OK City 35.58-vp *
2212 50.75 NZ, 2305 46.25 Aust.
2335 low-30 Canada
5-4:
0035 LU8AHW, LU1DAU, LU3DCA, LU3EX
0040 LU6DLB, 0110 LU4HFY
0115 LU6HFY 50.1+ Cordoba, Arg.-a
0130 CE3DZ
0150 CE3OK 50.1+ Santiago, Chile-a
LU7DZ
1258 D.Wells 30.30-ha (Carib.rly)
1440 35.58 Spanish
2135 50.74/.76 NZ, 2340 low-30 Can.
2344 KLF527
5-5:
0005 BBC 30.80, 1810 35's Spanish
2150-2230 50 bs CA, 2250 51 bs CA
(a-amateur, f-fire, ha-harmonic,
he-hydroelectric, mp-mobile phone,
tp-tone pager, vp-voice pager)

April 10.7-cm solar flux average down to 175.4, with the smoothed number for last October at 162. Latest predictions put the maximum in November 1979 with a smoothed spot number 156 + or - 33 (flux 200 + or - 32).

Other 50-MHz news: Apr 24 0700z South African beacon into a California. (long path); S. Africa to Hawaii; Cook Island to CA, FL, TX; Indonesia to Japan, Australia, Hawaii. Solomon Is. to CA and Neral, Guam heard CA.

73, Pat WA5IYX

IN SEARCH OF P.C.B.

Donald L. Blevins
1715 Earhart Road
Baltimore, Md 21221
301-574-2714

IN SEARCH OF...County Radio Nets.... It has been my observation that in order to obtain information about some smaller townships, boroughs, and villages, one must research the county these agencies are located within. In order to illustrate my point, I will submit for your examination the county radio network of Delaware and Montgomery Counties in Pennsylvania as submitted by Craig Willard of Narbeth, Pennsylvania.

The most frequent implementation of this type of network can be observed in more rural communities where cost factors figure into an already strained budget, and where law enforcement is a cooperative effort of several small but dedicated law enforcement agencies.

DELAWARE COUNTY POLICE DEPARTMENTS KGA 905 KRR 992 KZI 389

F1 39.82--F2 39.90--F3 39.78--F4 39.50--F5 39.60

First 2 Numbers

23 Eddystone	48 Colwyn	83 Bethel	*Last 2 Numbers
25 Parkside	51 County CID	84 Upper Chichester	*20 - 29 Cars
26 Upland	53 Sheriff	85 Marcus Hook	*41 - 49 Streets
27 Brookhaven	55 Court House	86 Trainer	* Sgts
29 Chester Twp	61 Sharon Hill	88 Lower Chichester	*90 Headquarters
30 Norwood	63 Folcroft	91 Springfield	*****
41 Lansdowne	65 Collingdale	93 Morton	
43 Aldan	67 Darby Twp	95 Swathmore	
44 Clifton Hts.	71 Newtown Square	98 Media	
45 E. Lansdowne	75 Marple	99 Mether Providence	
46 Yeadon	77 Upper Providence		
47 Darby (Moro)	81 Aston		

MONTGOMERY COUNTY POLICE DEPARTMENTS KGA 243 45.26 45.34 45.46

27 Bryn Athyn	53 Lansdale	76 Perkiomen
28 Springfield	54 Bridgeport	79 Marlborough, Green Lane
32 Whitmarsh	55 Hatfield Township	81 Red Hill
37 Hatboro	57 Hatfield Borough	82 Schwenksville
38 West Conshohocken	58 Valley Forge Park	83 Pennsburg, East Greenville
39 Horsham	59 Towamencin	84 Limerick
42 Conshohocken	61 Lower Salford	86 Royersford
43 Ambler	62 West Norriton	87 Upper Hanover
44 Plymouth	63 Franconia	88 Lower Pottsgrove
45 Lower Gwynedd	65 Souderton	89 New Hanover
46 Whitpain	66 Lower Providence	91 Douglass
47 Montgomery	67 Telford	99 Spring City
48 East Norriton	68 Upper Providence	400 Code Zero Van
49 North Wales	72 Collegeville	401 Code Zero Command Post
52 Norristown	73 Lower Fredrick	

Kevin Slater 1167 Ring Street NE Salem OH 97303 reports:

Salem Merchant Patrol: KSN 406 151.865 simplex
Marr's TV & Appliance: KDL 704 151.865
Silverton Fire Department Ambulance: KSW 931 155.16
Sentiam Memorial Hospital (Slayton) 155.34 KXC 351; 155.295 KYG 725(primary working channel for ambulance to hospital)
Marion County Sheriff's Office 154.74 WBN 919 repeater F1; 155.64 F2 repeater input frequency and used for car to car ; 155.73 KIV 220(no repeater)

{Note: local police jurisdictions may operate on above frequencies or use thier own as follows: 154.04 Aumsville/Turner/Jefferson; 155.01 Mount Angel; 155.37 Slayton/Silverton}

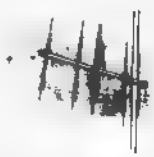
TIDBITS..... News of great value from our contributors make this feature great!!!

Summit County, Ohio reader submits:

FD- Police Department	SO- Sheriffs Office
OSP- Ohio State Patrol	LEERN- Law Enforcement Emergency Network
FD- Fire Department	

Police

- 39.62 Twinsburg PD KQB 401
Summit County SO Akron K4B 328
Summit County SO Post 1, Northfield KCI 519
- 39.84 Copley PD KSL 402
Fairlawn PD KTM 296
Bath PD KLE 535
- 44.74 OSP Post 77 Akron KQA 794(mobiles on 44.86)
- 45.02 Inter-Post OSP
- 45.10 OSP Post 77 Akron KQA 794(occasional use)
- 45.22 OSP Northfield (Hawthornden) KSL 845
- 154.935 Ohio LEERN
- 155.10 Barberton PD KDQ 330
- 155.145 Tallmadge PD/PD KDM 987
- 155.19 Stow PD KQJ 267 (COMM 9 Channel 1)
- 155.715 Hudson PD KBW 785
- 155.79 Turnpike Police - Boston KQE 579
- 155.85 Norton PD KDR 481
- 156.15 Akron PD Channel B K4A 784 (Detective Bureau)
- 156.21 Akron PD Channel A KQA 784
- 453.10 Akron Metropolitan Park PD K4Y 676
- 460.05 Akron PD Channel 1 KQY 606 (Computer)
- 460.10 Summit County SO Post 1 Northfield KQY 598
- 460.175 Summit County SO Post 2 Springfield TWP K4Y 601
- 460.25 Summit County SO/Springfield TWP PD K4Y 601
- 460.325 Akron PD Channel 2 KQY 606
- 460.375 Akron PD Channel 3 K4Y 608 (same as 156.21)
- 460.425 Summit County SO Akron K4Y 600



QSL CORNER

FM-QSL

Thomas J. Yingling, Jr.
221 Pinewood Road
Baltimore, MD 21222
Deadline: 10th
Phone # 1-401-292-5649

- FL WLT 103.1 Greerhobee, P.O. Box 1247, 33472. Letter in 40 days from Al Stokes, General Manager & Chief Engineer. Sawatzky
- POCF 92.7 Punta Gorda, P. O. Box 1929, 33950. Letter from J. Reinart in 2 weeks with coverage maps. Yingling
- IA KEAY 76.1 Clinton, Box 708, 52732. Letter from Hank Dillmann, GM with a specific veris message. Zark
- KPMI 97.4 Des Moines, 2907 Merle Hay Rd, 50310. Letter, map, & 2 patches from Jerry L. Sieph, Asst. Gen. Mgr. in charge of Programming. Yingling
- IL WYS 98.3 Canton, P. O. Box 600, 61520. Letter & map from Charles E. Wright, Gen. Mgr. in 2 1/2 weeks. Yingling
- WTMZ 102.3 Morton, Box 3498. Letter from Wayne R. Miller, SM. Eddie
- WQAI 107.5 Chicago, 6 W. Michigan Ave, 60602. Letter from Jack Layton, CE Eddie
- WTFM 105.9 Elmwood Park, 333 W. Michigan Ave, Chicago, 60611. Letter from from James P. Walsh, Operations Manager. Eddie
- WNIB 97.1 Chicago, 12 E. Delaware, 60611. Letter from Sonia Filcuan, GM Eddie
- KS KTRD 98.9 Leaworth, 335 Muncie Rd, 66048. Letter from Richard R. Hagerman, Engineer. Zark
- KLRP 104.9 Emporia, Box 998, 68801. Letter from F.J. McKernan, 3rd, Mgr mentioned looking for a CE for AM/FM operations. Zark
- KKKY 95.7 Ottawa, Box 16, 66067. Form from John Collinson, CE, gives sales office of 2104 W. 25th, Lawrence, KS 66044. Zark
- KAMS 96.7 Larned, 8th & Topeka, 67550. Letter from Chris Brickley, Program Dir. mentions that "We normally do not confirm DX report to the snowball effect. I have made an exception in your case due to the extreme distance." Here's one you have to look out for, the snowball effect. Yingling
- MO KAOL 101.1 Carrollton, Box 278, 801 N. Jefferson St, 64633. Letter from Dan Davis, Chief Engineer Eddie
- KLDN 127.1 Eikon, 209 E. 2nd St, 65026. Letter from Jay Fisher, Asst. Mgr & PD Eddie
- NH WHER 100.3 Portsmouth, Letter from Antonio Vaccaro in 2 weeks. He reports that my report is the first reception report in 12 years. Come on all you northerners you can do better than this. (I find it hard to believe that they received no reports in 12 years for the fm station, how about you?—All those who have WHER-FM qsl'ed write to me & report, ck? Ed) Dalton
- OH WPTW 95.7 Piqua, 1825 Covington Ave, 45356. Lengthy letter from Donald J. Kuether, CE, & also enclosed coverage maps & rate card. Sawatzky
- WRKY 103.5 Steubenville, Broadcast Center, 320 Market St, 43952. Letter from William R. Chesson, General Manager Sawatzky
- WSRD 101.1 Youngstown, 401 N. Elaine Ave, 44505. Letter from Jerry Starr, Production Music Director in 8 days. Sawatzky
- PA WOSU 88.9 Selinsgrove, Susquehanna University, 17870. Letter from Larry D. Augustine, Gen. Mgr. with reply in 2 months. Yingling
- WV 89.9 State College, 315 S. Atherton St. 16801. Letter & coverage-map from Jack Van Sciver, CE WHITE. "...quite interested in vhf propagation phenomena." he mentions. Sawatzky
- VA WEER 107.7 Warrenton, P. O. Box 817, 22186. Letter from James R. Thorman, CE. Yingling
- WXRI 105.3 Portsmouth, P. O. Box 111, 1318 Spratley St, 23705. Letter from Randy Stafford, Bookkeeper for Michael Meredith, Operations Manager. Yingling
- WRAR 105.5 Tappanhook, 22560. Zeroxed letterhead paper letter qsl from Robert W. Lowry, no title, reply in 1 week. Yingling
- WWSV 104.7 Crews 400 Melody Lane, 23930. Letter from C. E. Wilson, President. Yingling
- WRVQ 94.5 Richmond, P. O. Box 1394. 23212. Letter, card & a Q-94 T-shirt in 5 days from Harry Lons, CE. Sawatzky
- WEZS 103.7 Richmond, 5900 Midlothian Pike, 23225. Letter & WEZS coffee mug in 5 days from Thomas L. Mann, CE Sawatzky
- WPLZ 99.3 Petersburg, P. O. Box 231, 23803. Letter from Paul R. Bock, Jr. K4MSG, CE, "I was absolutely delighted..& never before have we received a report on our fm station." also describes how he worked on 2-meter ham band with the incredible tropo that night 8-20-76. Sawatzky

Reporters are: Sawatzky, Zark, Eddie, Dalton, & ed-Yingling. This was all fm qsls again for this is what I get the most reports on, but I do need new stuff soon to keep a full page column going strong. Please send in something so I will know you are a live. 73's Tom Yingling

TV

STATISTICS

Michael L. Hogan
13910 Chippewa Avenue
Apartment 1
Burnham, Illinois 60633
Deadline: the 10th
Phone # 312-868-4392

DXer, Location	Total	UHF	Xltr	Es	MS	Au	YB	As of
Bill Draeb, Kewaunee WI	724	326	65	181	113	1	53	5/8
Tom Yingling, Jr., Baltimore MD	425	135	18	181	30	0	69	4/27
Fred McCormack, Des Lacs ND	313	16	22	205	45	0	63	5/9
John Combs, Orlando FL	306	85	4	129	24	0	72	4/24
Jim White, Waukesha WI	301	87	2	79	16	1	64	4/23
Mike Reid, Willowdale ON	288	93	12	80	6	0	??	5/6
Mike Hollis, Ft. Campbell KY	275	116	2	14	6	0	78	4/23
B.W. Battin, Duluth MN	251	109	0	68	3	0	76	4/24
Mike Scheel, Davenport IA	198	96	9	45	0	0	72	4/19
Jim Pizzi, Orcutt CA	197	48	23	113	5	0	63	4/30
Ed Brindle, Lestrobe PA	169	53	0	53	1	0	75	5/8
William Hepburn, Niagara Falls ON	149	39	2	49	0	0	76	4/27
Fred McCormack, Fargo ND	145	16	3	78	0	2	74	5/7
Mike Hogan, Burnham IL	90	42	0	22	0	0	73	5/13
Robert Goodman, Cicero IL	88	53	0	18	0	0	76	5/1
Dave Mascal, Fortville IN	66	18	0	22	0	0	74	5/1
Robert Ross, London ON	51	21	8	5	0	0	77	4/24

Now, here are some comments about how this column is starting to shape up. I would like to thank the interested members of this club for their reports and also the interesting comments, about the column. I will keep in mind all of your suggestions.

As for the above scoreboard: This month you see the DXers listed by total stations seen, the next time you see the scoreboard the DXers will be listed by Total Political Units and finally, the third way the DXers will be listed by will be a summary of average distances. I choose to do the listings this way so that the scoreboard will take a different look almost each time it is printed.

The next time this column appears I will list the distance records for the channels 2 thru 6. I may also list the distance records for channels 7-13 at that time. The deadline for all records for channels 2 thru 13 is July 10th. Also in store will be a special listing for F2 loggings. So if any of you were able to manage some F2 loggings please submit them to this column.

73's

Michael

TV-9
The Way Milwaukee Sees It.
WTWY-Telesis & Columbus, Channel 9

Radio Television Kaduna

WASH

4

13N
WFTV-ORLANDO



WJEL-TV
KANSAS CITY
KANSAS CITY
BRISTOL

11

2

8
WFAA-TV

23
KMPH

KSTP
TV

5

33N

18
WZZM-TV

40
KTXL-TV40

38

WDIO-TV-WIRT-13

14

WCIA 3



STATISTICS

Fred Nordquist
7945 Boxford Road
Clay, NY 13041
Deadlines: the 10th

June 1979

91 MHZ DISTANCE RECORDS

FREQ	PROP	CALL	LOCATION	MILES	DXER, LOCATION
91.1	Es	WGGL	MI Houghton	1350	Glenn Hauser, Von Ormy TX
	Tr	WFAM	FL Jacksonville	1020	Glenn Hauser, Von Ormy TX
	MS	KSJN	MN New Brighton	1130	Glenn Hauser, Von Ormy TX
91.3	Au	WVUH	IN Vincennes	745	Fred McCormack, Fargo ND
	Es	WIPR	PR San Juan	1820	Carlton Howington, Uniontown OH
	Tr	WTHS	FL Miami	1155	Glenn Hauser, Von Ormy TX
91.5	MS	WVHI	WI Highland	740	Larry Vogt, Springfield VA
	Au	WCNY	NY Syracuse	525	Russ Brown, St. Joseph MI
	Es	WNTS	NY New York City	1445	Fred McCormack, Des Laos ND
91.7	Tr	WFUS	FL Tallahassee	840	Rick Sanford, Burnet TX
	MS	WMDM	WI Suring	1220	Glenn Hauser, Von Ormy TX
	Au	WRPI	NY Troy	505	Frank Merrill, Milan MI
91.9	Es	KANU	KS Lawrence	tie	Russ Brown, St. Joseph MI
	Tr	KRSN	MN Worthington	1435	Jim Pissi, Oremut, CA
	MS	KOSU	OK Stillwater	790	Bruce Elving, Adolph MN
91.9	Au	KOSU	OK Stillwater	880	Fred McCormack, Des Laos ND
	Es	WSIU	IL Carbondale	700	Russ Brown, St. Joseph MI
	Tr	WSIU	IL Carbondale	1725	Jim Pissi, Santa Maria CA
91.9	MS	WHRM	WI Rib Mountain	810	Glenn Hauser, Von Ormy TX
	Au	WSIU	IL Carbondale	1005	Richard Wood, Baton Rouge LA
				750	Fred McCormack, Fargo ND

92 MHZ DISTANCE RECORDS

92.1	Es	KHFO	DF Mexico City	1710	Steven Wisblood, Santa Maria CA
	Tr	WRLS	WI Hayward	790	Robert Cooper, Oklahoma City OK
	MS	WFNY	WI Racine	715	Robert Cooper, Oklahoma City OK
92.15	Au	WIXE	WI Sun Prairie	260	Andy Bolin, Charleston IL
	Es	CMBC	Habana, Cuba	1330	Glenn Hauser, Enid OK
	Tr	WDBO	FL Orlando	1740	Fred McCormack, Des Laos ND
92.3	MS	WDBO	FL Orlando	1065	Glenn Hauser, Von Ormy TX
	Es	WKHL	AL Montgomery	1050	John Ebaling, Prossit MN
	Au	KLIC	OR Portland	1030	Fred McCormack, Des Laos ND
92.5	Es	WPAP	FL Panama City	1505	Fred McCormack, Des Laos ND
	Tr	KYND	TX Pasadena	985	Russ Brown, St. Joseph MI
	MS	WIFI	PA Philadelphia	1105	Richard Wood, Baton Rouge LA
92.7	Au	WHEE	OH Toledo	750	Fred McCormack, Fargo ND
	Es	LJAZ	CA Alameda	2375	Michael Dalton, Clearwater FL
	Tr	CKSO	ON Sudbury	610	Dennis Moe, St. Ansgar IA
92.9	MS	WDUX	WI Waupaca	430	Peter Sawatsky, Waterloo ON
	Au	KBRI	NE O'Neill	430	Fred McCormack, Des Laos ND
	Es	WSCD	MN Duluth	1640	John M. Jefferson, Concord CA
92.9	Tr	WZGC	GA Atlanta	890	Glenn Hauser, Von Ormy TX
	MS	KITY	TX San Antonio	1235	Carlton Howington, Uniontown OH
	Au	WVNY	VT Burlington	855	Andy Bolin, Charleston IL

Next time I will run 93 MHZ distance records. Later this summer I plan to run all new distance records only, for all frequencies. So if you have been holding back until your frequency records are printed, you need no longer wait. Send them in now.

STATES STATES

State	#-Dier	#-Dier	State	#-Dier	#-Dier	State	#-Dier	#-Dier	State	#-Dier	#-Dier	State	#-Dier	#-Dier
AL	31-fm	30-je	IN	133-rs	44-dh	NE	21-je	15-fm/fn	SC	26-je	8-pe	AT	2-je	
AK	none		IA	80-je	30-fm	NV	12-fm	3-je	SD	20-fm	15-je	BC	none	
AZ	22-fm	20-je	KS	39-dh	28-fm	NH	16-rje	6-mb	TN	28-fm	18-fm	MB	3-je	1-fn/fn
AR	28-fm	25-dh	KY	51-rs	23-fm	NJ	36-af	35-sw	TX	189-ris	129-fm	WB	none	ps
CA	169-jj	74-fm	LA	27-je	45-ris	NM	26-fm	22-je	UT	15-ris	8-je	EP	none	
CO	17-je	3-pe	ME	24-rjs	9-je	NY	144-fm	129-je	VT	8-mb	8-rjs	MS	1-pe	1-fn
CT	38-mb	38-rjs	MD	20-sw	14-mb	NC	53-je	16-fm	VA	36-je	20-fm	ON	49-fm	
DE	11-sw	4-mb	MA	71-rjs	58-mb	ND	17-fm	7-je	WA	7-fm	2-je		34-pe	
FL	71-pe	67-fm	MI	87-rs	80-pe	OH	149-rs	91-pe	WV	22-rs	12-fm	PEI	none	
GA	42-je	25-fm	MN	105-je	62-fm	OK	52-dh	29-fm	WI	106-je	40-pe	PQ	15-fm	
HA	none		MS	28-fm	63-fm	OR	16-fm	-	WY	2-pe	1-je/fm		9-je	
ID	9-je	12-ris	MO	57-dh	36-je	PA	89-fm	86-je				SA	none	
IL	114-be	105-rs	MT	6-je	4-fm	RI	8-rjs	7-mb/fm	DC	13-sw	13-je			

fn-Fred Nordquist NI; rs-Ralph Strobel IN; dh-Danny Buntin OK; fm-F.McCormack ND; jj-J.Jefferson CA; je-J. Ebaling MN; sw-S. West PA; be-B. Elving MN; mb-M. Bugaj CT; af-E. Fader NI; ris-R. Steinberger MA; dh-D. Hascall IN; pe-P. Sawatsky ON; je-J. Smith WI; ris-R. Sanford TX
Please send in your Scoreboard totals by July 10th

International Radio Club of America



Attention mediumwave DXers! The 1979 annual IRCA convention will be held at Peoria, Illinois on August 24, 25, and 26. This is the weekend prior to the NRC convention at St. Louis. Peoria is 170 miles north of St. Louis and 150 miles south west of Chicago. Peoria is the world headquarters of Caterpillar Tractor and the metro area has a population of over 200,000.

The site of this year's convention will be the Peoria Hilton at 501 Main St. in downtown Peoria. The Hilton is located 2 blocks from I-74.

There will be station tours of WKOL (AM) 1350, WZRO (FM) 104.9, and WMBD (AM) 1470, WKZW (FM), plus WHED TV 31. A tour will also be made of WKOL/WZRO's transmitting site with Mr. Melvin Feldman, President and Chief Engineer of WKOL/WZRO showing us around the 4 tower site. There will be a banquet Saturday nite, Aug. 25, and an auction on Sunday. A picnic and softball game are also planned for Saturday. Registration fee: \$15.00 in advance, or \$17.00 at the door. For more info and registration form, contact:

John Clammer, 2937 W. Gilbert, Peoria, Illinois 61604 (309) 685-1880

Any DXer is welcome, regardless of club or interest!

((((((((((((((((((((RCMA)))))))))))))))) Radio Communications Monitoring Association

PO Box 4563 / Anaheim, CA 92803

RADIO COMMUNICATIONS MONITORING ASSOCIATION (RCMA) is grateful to WTFDA for accepting the proposal of exchanging half page ads in each other's publications.

RCMA was founded in May of 1975 and is a Full Member ANARC club. We have gone from a Southern California local club of six members to a nationwide club of about 700 members and presently are gaining new members at a higher rate than ever before.

RCMA specializes primarily in non-DX, non-skip reception of two way communications (VHF/UHF Utility, if you like) in the Public Service and Aircraft bands of 30-50, 118-136, 148-174, 225-400, 406-420, and 450-512 MHz. By popular demand we have started a Low Band (30-50 MHz) Skip column with the May issue of the RCMA Newsletter.

The RCMA Newsletter is currently (May 1979) in transition from a one man editor to a multi-editor system with regional and special interest editors scattered across the country. Some of the columns for which we have editors are: "Aircraft", "Frequencies and Radio Systems", "Technical Topics", "Low Band Skip", "Marketplace", "Contact" (a column devoted to helping members contact other members who share similar listening interests or who live in a particular geographic area), "Military", "Federal Gov't" and "Monitoring and the Law". Others are planned.

If you enjoy listening to the message content of the transmissions of some or all of the following, RCMA might be of interest to you: police, sheriff, highway patrol, state police, Federal law enforcement and other Federal agencies, fire and forestry departments, railroads, mobile telephone, hospitals-ambulances-paramedics, taxis, trucks, boats and ships along the coast and in other waterways, road and utility departments, private security guards, prisons, weather, disaster communications, a great variety of private business, military communications, satellites, private/commercial aircraft in communication with each other and airport control towers and radar controllers and ground stations offering weather information, and more.

Our dues are \$8.00 per year (subject to increase). Should you be interested, send a business size SASE to the above address for more information and an application form (an application form must accompany each new member dues payment to be processed). For a sample copy of the RCMA Newsletter send three 15¢ mint stamps with your request. (No SASE for sample copy.)



**TOUGH
TO BEAT!**

WORLDWIDE TV-FM DX ASSOCIATION

Post Office Box 202 Whiting, Indiana 46394 U.S.A.

Established 1967

SERVING THE VHF-UHF DX ENTHUSIAST



DUES: U.S. and CANADA, \$11 (via first class); overseas, \$18 (via air mail)

The VHF-UHF DIGEST is the official publication of the Worldwide TV-FM DX Association. WTFDA is a non-profit organization and a member club in the Association of North American Radio Clubs (ANARC).

Persons contributing their efforts for the Worldwide TV-FM DX Association do so without any monetary compensation. Dues and all other revenue cover printing, postage, and other expenses.

The WTFDA is governed by a five-man board of directors, composed of Morrie Goldman, Mike Hogan, Pete Oprisko, Bill Thompson, and John Zondlo. ANARC representatives are Morrie Goldman, Pete Oprisko, and John Zondlo.

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